John Cranford,
M. D.

A

TREATISE

ON THE

DYSENTERY:

John With a DESCRIPTION of the Cauſes

EPIDEMIC DYSENTERY

That happened in SWITZERLAND in the Year 1765.

Tranſlated from the Original GERMAN of

JOHN GEORGE ZIMMERMAN, M.D.

Phyſician in Ordinary to his BRITANNIC MAJESTY at Hanover,

By C. R. HOPSON, M.D.

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TO

WILLIAM CULLEN, M. D.

PROFESSOR of MEDICINE in the Univerſity of EDINBURGH.

SIR,

THE diſtinguiſhing marks of civility, which I received at your hands during the ſtay I made ſome time ſince at Edinburgh, have induced me to offer the following tranſlation, as a ſmall token of the reſpect I owe you on many accounts. Indeed I could not ſo properly dedicate it to any one in Britain as to yourſelf: for (not to mention the juſt claim you have to my acknowledgements for the opportunities I have enjoyed of improving in my profeſſion under your auſpices) you are likewiſe entitled to the thanks

of the author, as having already in the moſt effectual and diſtinguiſhed manner patronized his work, while it was in its native dreſs, by recommending it publicly to your diſciples: and if it ſhould now make its way in the world in its preſent diſguiſe, it will perhaps be more owing to the force of your recommendation, than to its own merits; which, however great, might have been otherwiſe totally obſcured by the defects of the tranſlator. Theſe defects, however, I humbly preſume, lie chiefly in the ſtile; and as they could not be well avoided (the tranſlation having been made ſeveral years ago in the midſt of Germany, when the tranſlator had poſſibly, by a long abode in foreign countries, ſubſtituted the idioms of their languages for thoſe of his mother tongue) it is to be hoped, they will find excuſe with you and the public.

Indeed

Indeed what I have principally aimed at in this tranſlation is not elegance, but exactneſs; the former being by no means neceſſary in a work of this nature: though the author has diſplayed in this treatiſe a purity and elegance of ſtile, which have contributed to place him in the firſt claſs of German writers; and indeed has frequently indulged himſelf (agreeably to the genius of his countrymen) in ſuch high flights of metaphorical expreſſion and poetical language, as I have not in general ventured to imitate. But to do real juſtice to his work, would require much more leiſure, than my preſent occupations will allow: I have only been able to make a curſory review of it, and for the reſt muſt rely on your patronage for its favourable reception with the public; with which it will have the additional merit of being the only treatiſe, beſides

ſides your excellent Noſology, that has ever eſtabliſhed the true criterion of the diſorder, the ſubject of the following pages; which are here ſubmitted to your indulgent inſpection, with the greateſt deference and reſpect, by,

SIR,

Your obliged

Humble ſervant,

C. R. HOPSON.

The TRANSLATOR'S

PREFACE.

THE following treatiſe was written originally in the German language by Dr. Zimmerman, a Swiſs phyſician, a friend and diſciple of the great Haller, and not more admired by his countrymen for the beauty of his ſtile and force of expreſſion, than for his great inſight into the theory and practice of phyſic. He is the author of an univerſally admired work on *Experience in Medicine*, of which he has already publiſhed two volumes, and has promiſed a continuation, that is impatiently expected by the public. The Germans are ſo ſenſible of his merit, that ſome time before the publication of the above-mentioned production he was invited to fill the practical chair in his Majeſty's univerſity of Gottingen, which honour he however declined. The work, of which the following pages are a tranſlation, was chiefly intended by its public-ſpirited author

thor to diſſipate the prejudices of his countrymen (eſpecially thoſe of the lower claſs) with regard to the treatment to be uſed in the dyſentery. That part of it the tranſlator has omitted; and has occaſionally abridged ſome other parts of the work, which did not immediately reſpect the principal ſubject. As to the ſtile, the tranſlator is very ſenſible of his defects in that point, owing principally to his abſence from his native country; but hopes for indulgence from the public, to which he was ambitious of being ſerviceable in any reſpect.

THE

THE

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UNIVERSITY OF MARYLAND
1813
SCHOOL OF MEDICINE

A TREATISE ON THE DYSENTERY.

CHAP. I.

Deſcription of the DISORDER.

THE dyſentery has raged this year in the canton of Bern, in the marquiſate of Torgau, in divers other parts of Switzerland, and in Swabia. It has been alſo very formidable in thoſe diſtricts of Upper-Auſtria, which lie neareſt to us.

It made its firſt appearance in the month of June; in Auguſt and September roſe to its higheſt pitch; in the beginning of October loſt ground in all parts; and, in the middle of this month, generally ſpeaking, made its exit. Though [illegible], in the middle of November, ſome here and there were ſeized with this diſorder; and even during the ſevereſt cold in December,

and January 1766, I saw people who were attacked by a gentle dysentery: in like manner, about this time, under the same constitution of the air, the putrid fever, as it is called among us, and particularly the putrid pleurisy, began their ravages, principally in Lausanne, and extended them wide around as far as our canton, and the neighbouring provinces of Upper-Austria and Swabia.

Many were taken with this malady, without the least preceding symptom, and that chiefly in desperate cases; in others, it gave tokens of its approach before hand, and came on by degrees.

All those who were violently disordered, were seized at first with an universal chill, which had different degrees of duration; sometimes it was long and very violent, many had only a small paroxysm, with many it returned in the course of the fever, and went off in a hot fit. All of them felt likewise an extreme lassitude over the whole body, at the first coming on of the disorder, and that generally in the back and loins. The cholic came on immediately at the beginning, with great violence; but the evacuation, with some people, did not follow so quick; many were at first even bound, these had violent

lent tormina, and were in a much worſe condition, than thoſe who were obliged directly to hurry to ſtool.

Almoſt every one, on their firſt being ſeized, complained of a bitterneſs in the mouth, and a continual inclination to vomit. Many brought up, juſt after the cold fit, a bilious matter; ſome vomited very violently the firſt day, and were relieved by it; many had this propenſity to vomit, even in the progreſs of the diſeaſe, and continued to caſt up with great benefit till the fourth day. Such as from the firſt had ſought for refuge in wine, and other hot things, brought up every thing they took into their ſtomachs, almoſt every day, complained of the heart-burn, and were in the greateſt danger.

The hot fit followed immediately after the cold; and in very bad caſes, ſome had the firſt day an intolerable head-ach. The fever at firſt appeared to be ſmall in moſt, but in the courſe of the diſorder, was ſtill more and more conſiderable; yet in the moſt violent ſpecies, and where there was the moſt danger, it was at times not obſervable, and the pulſe infinitely weak; in leſs violent kinds, the fever was often very high: I ſaw too, in ſome, even at the firſt day, a perfect delirium; in others, a continual lethar-

gy, which accompanied many in desperate cases, and was particularly constant in children. The disease was very favourable in some, after a slight attack: these had little fever in the beginning, and their stools, even the third day, continued to be yellow, and very little offensive; but after that time, they began to complain of a bitter taste in their mouths, and the violence of the fever increasedwith, the increasing discolouration of their stools.

I always found the excrements thin; but very often viscous, and that even at the beginning of the disorder. With some, they were quite bloody the first day, with others, later: in those that were severely attacked, as well as young children, they were mixed from the beginning, with grumous blood. I have seen children, from whom, in the first days of the malady, the blood has flowed in streams down their legs; just after appeared a quite green matter, and this gave place to a red: with most, the excrements were at the same time white, red, yellow, brown, green, and sometimes even black, for the most part yielding a very bad smell, which was at times perfectly cadaverous. The excretions in some, who had taken no medicine, remained for a whole week quite white, and came away without pain; a week after that, red, with great pain; and throughout

several

ſeveral ſucceeding weeks, red, white, and very little painful.

In ſlight indiſpoſitions, the patients went to ſtool about fifteen or twenty times a day, and many forty or fifty. I ſaw, and even cured ſome, that in the ſpace of twelve hours, had from an hundred and fifty to two hundred ſtools; and whoſe evacuations came ſo quick one upon another, that one would have thought their whole inſide was coming out at their fundament.

The tormina were always more violent before going to ſtool, and I thought my patients very well off, when the pains remitted after evacuation; in many they were very ſharp, and in ſevere illneſſes drove the patient almoſt to deſpair. They were accompanied in the courſe of the diſorder, by a ſmart pain in the back, ſometimes a heat of urine, and in moſt perſons by a teneſmus.

In the worſt ſpecies, the cheſt was oppreſſed. In all kinds I found the appetite and natural ſleep entirely gone: moſt had an inextinguiſhable thirſt, and the greateſt part were obliged to keep their beds, by reaſon of their extreme feebleneſs; many were inconceivably weak, and at times fainted away. There were, however,

ſome who were able to ſit up out of bed; and many, in light indiſpoſitions, walked about. Many ſweated, but without benefit.

The bad ſorts of this dyſentery laſted ſometimes from fourteen to ſixteen days, eſpecially when proper evacuations could not be made during the firſt days of the diſorder; though moſt of my patients recovered in five or ſix days. There appeared in ſome, that were very hard beſet by the diſorder, a raſh on the mouth and tongue, in others, all over the abdomen, and in others, all over the body; though the diſeaſe, in reality, was as good as cured. In one ſingle ſubject, I ſaw, after a happy and perfect cure, a prolapſus of the rectum. I have not experienced a relapſe in any of my patients, excepting two in one perſon; the firſt proceeding from a violent fit of anger, and the other, becauſe he got out of bed in the night, and was forced to run about the ſtreets ſeveral times in a hard ſhower of rain.

They who were the moſt dangerouſly ill, had a regular miliary eruption, and at the ſame time, ulcers about the body, at a time when the diſorder was at its greateſt height, if they had not taken the purging medicine that was ordered. The greateſt misfortune that attended very young children,

dren, who were very ſeverely ſeized by this malady, conſiſted in the ſpaſmodic contractions of the nerves, which came on at its firſt commencement, and by which they were immediately deprived of all ſenſation.

When the diſeaſe terminated fatally, the tormina did not remit after going to ſtool, but were every day more and more intolerable, and the ſtools remained equal in number; a hiccough, at times a vomiting, and ſwelling of the abdomen next followed, and laſtly, the cholic pains ceaſed. Death brought up the rear, (eſpecially with them who had drank freely of wine) as early as the fifth, eighth, nineth, and fourteenth day, and ſometimes later.

They that in ſevere caſes, only took medicines in the beginning of the diſtemper, and afterwards laid them aſide, were in very great danger; and though they took to them again in ſix or eight days, yet ſtill they continued a long time ill, if at length they did not happen to die. Many that took no medicines at all, had a gentle, but tedious dyſentery; gripes, teneſmus, and alſo blood mixed with their excretions, which otherwiſe had only been ſlimy; great wearineſs in the members, frequent returns of the cold fit, violent ſweats, indigeſtion,

and pains in the ſtomach from every thing they eat. Others were haraſſed with a flying gout; others, among whom were likewiſe children, with a dropſy; others, again, with obſtinate ſwellings in the feet; and with others, from whom the evil ſeemed to go away of itſelf, ſtill remained a great pain in the loins, and a rheumatiſm in the joints.

The more favourable ſpecies of the dyſentery, ſhewed themſelves by an univerſal languor, a ſhivering, ſome propenſity to vomit, a cholic of no very long continuance, and much leſs frequent, as well as leſs griping ſtools. The excrements were for the moſt part white, and their food came away undigeſted; the blood did not appear till after ſome days, or elſe the ſigns of it were hardly to be perceived.

Some, in the beginning or end of the epidemy, eſpecially thoſe who lived towards the boundaries of its ravages, were only troubled with a violent griping, which continued five or ſix days, and ſometimes a fortnight, without purging, but rather a conſtipation of the belly: though when I had given them ſomething opening, I found their excretions mixed with blood and white like pus. Such as had taken no medicine

dicine in these circumstances, fell into a most dreadful dysentery.

Many had a mere griping diarrhœa, which staid with most persons but a few days, in which, however, I found the excrements frothy, and mixed with gall. A purging of this kind remained six weeks with a lad, to whom I purposely gave no medicines, as I hoped, that by means of this, he would be rid of a different kind of distemper, which returned upon him every year; which accordingly happened.

Some, that were not attacked by the dysentery, where it had raged, but had attended on those that were sick of this disorder, or lived in the house with them, at the end of the epidemy were plagued with large boils on the breast, under the arms, on the knees, and legs; some had them on the head, and over their whole body; many, instead of boils, had great white bladders: yet none of these people kept their beds.

I have taken the whole of these remarks from observations made by myself, and that not with a superficial inattentive eye, but with all the exactness that the object of my profession required; and though, without doubt, this does not

not comprehend every thing that other phyſicians might have ſeen during our epidemy, yet is it quite ſufficient for my purpoſe.

CHAP. II.

Explication of the Disorder.

SYDENHAM's noted obſervation on the cloſe connexion between the epidemical diſorders of the ſame year, was fully verified here. After an aſtoniſhing number of putrid fevers, followed the dyſentery, attended likewiſe with a putrid fever.

Many thouſands of people in Switzerland, and chiefly in the canton of Bern, were from the end of the year 1764, to Eaſter 1765, and ſtill later, attacked with a putrid fever, which, for the moſt part, attacked the breaſt, and had the appearance of a pleuriſy; though ſometimes the liver was likewiſe ulcerated, or the inteſtines affected with a gangrene, after which even the heart was found inflamed and gangrened: theſe laſt caſes, however, were very rare, and the diſtemper fixed itſelf moſtly on the breaſt. In April and May 1765, it ſhewed itſelf at the fulleſt in our parts; I alſo ſaw even in June, ſome ſick

of

of the putrid fever at the very ſame time, and in the ſame villages in which the dyſentery firſt began. In the ſame manner, at the going off of the putrid fever that ravaged with ſuch violence in and about Lauſanne, in the year 1765, a dyſentery followed of the very ſame complexion, which like that too became epidemic in harveſt time.

The analogy of our dyſentery, with the preceding epidemical putrid fever, appeared from the reſemblance of the ſymptoms in each diſorder, of the method of cure that was the moſt ſucceſsful in both, and even of the effects that followed the errors therein committed.

The putrid fever in May 1765, ſeized on the children and adults in my neighbourhood, ſo very ſuddenly, that they were perfectly in health, and extremely ill, within the ſpace of a quarter of an hour; though I have for ſome days before the real attack, remarked a great ſenſation of cold in the hands and feet of ſome of my patients, together with a ſhivering, but for the moſt part the aſſault manifeſted itſelf very ſuddenly: it was juſt the ſame in the dyſentery. In the putrid fever, all thoſe that were violently ill, had in the beginning an univerſal chill, which had different degrees of duration, and ſometimes

ſometimes it was long and very violent; many had only a ſmall paroxyſm; with many it returned from time to time in the courſe of the fever, and went off in a hot fit: the ſame things happened in the dyſentery. In the putrid fever, every one at the firſt coming on of the diſorder, felt a pain in all their joints, as if they had been bruiſed, and eſpecially in the back and loins: the ſame happened in the dyſentery.

In the putrid fever, almoſt every one on their firſt being ſeized, complained of a bitterneſs in the mouth, and a continual inclination to vomit. Many brought up, juſt after the cold fit, a bilious matter; ſome vomited very violently the firſt day, and were relieved by it; many had this propenſity to vomit, even in the progreſs of the diſeaſe: the ſame happened in the dyſentery. In the putrid fever, the hot fit followed immediately upon the cold, and very often an intolerable head-ach. The fever at firſt appeared to be ſmall in moſt, if they did not directly heat themſelves with wine and brandy, but in the courſe of the diſorder was ſtill more and more conſiderable; though in very deſperate caſes, it had a ſly, deceitful, ſlow manner, at the ſame time the pulſe was very weak; ſome that were in great danger, fell into a lethargy: the very ſame happened in the dyſen-

dyſentery. In the putrid fever, the expectorated matter was tinged with gall, and at times with blood; the ſtools were yellow, green, dark-brown, of a putrid, intolerably ſtinking, and ſometimes cadaverous ſmell: the ſame happened in the dyſentery. In the putrid fever, the excretions being mingled with blood, was no ſign at all of inflammation, as the blood diſappeared after taking the emetic: the ſame held good, with regard to the ſtools in the dyſentery. In the putrid fever, the appetite and natural ſleep were almoſt entirely gone; in bad caſes, the feebleneſs was inexpreſſible the very firſt day; the patients were frequently ſeized with faintings; the profuſe ſweat that I remarked throughout the whole courſe of the diſtemper in thoſe patients, who had neglected to take a purge at the beginning, was of no ſervice; gave not the leaſt relief, was evidently ſymptomatic, and never critical: I ſaw the very ſame thing in the dyſentery.

In the putrid fever, during the progreſs of an illneſs, that continued ſomething longer than uſual, a miliary eruption broke out, and ſometimes large exanthemata, that came to ſuppuration, if the bilious matter was not purged off in great quantity, directly at the beginning; ſometimes this raſh was taken away by a purging,

that came of itſelf. In Solothurn it diſappeared directly, when at the commencement of the illneſs, recourſe was had to emetics; it is alſo, according to the numerous obſervations I have lately made in that city again, every where about, ſince people have endeavoured to throw it out in all putrid fevers, during the ſpace of many weeks; which makes it palpably evident, that the miliary eruption in ſuch caſes, is very often nothing more than an accidental effect of a diſeaſe not well looked after, and therefore is not critical, but the fruit of the method of cure. Already, in the beginning of this century, it has been obſerved in Breſlau, that a mortal miliary eruption, has ſometimes appeared out likewiſe in the dyſentery; in that of Nimeguen, in 1736, the miliary eruption was frequently remarked at the end of the diſorder; in the dyſentery that was epidemic in Zurick, 1764, miliary puſtules broke out ſometimes on the day of the patient's death. In our dyſentery, I ſaw a very dangerous ſymptomatic miliary eruption, in ſuch, as in the beginning, had not taken the purge according to orders; and a harmleſs critical breaking out in ſuch, as had happily got over a violent dyſentery.

In the putrid fever, the phyſicians were afraid to truſt the cure of the diſorder to the evacuations

tions made by nature herſelf, as art was found to effect them much better than nature; it was the ſame in our dyſentery. In the putrid fever, an inflammation ſometimes joined itſelf with other effects of putrid matter; theſe caſes were extremely dangerous; a ſhort time too before death, the abdomen was obſerved to ſwell, and a gangrene on the inflamed part: it was the ſame in the dyſentery. In the putrid fever, I have often remarked, that the diſorder was of long continuance, when the patient, on account of his weakneſs (which proceeded from that very cauſe) would not allow the phyſician to purge his body perfectly of its bilious matter; and afterwards remove fully, by the uſe of proper means, the perhaps remaining corruption of the humours; I have remarked too, that the whole cure was unſtable and imperfect, when they often changed their medicines, and did not continue long enough a well indicated remedy. The ſame I ſaw in the dyſentery.

At the time that the putrid fever reigned, there were likewiſe many ſlight indiſpoſitions, reſembling the other in miniature, which were of the ſame nature, but attended with infinitely ſlighter ſymptoms, were eaſily cured, and even vaniſhed of themſelves without the help of medicine: the very ſame happened in the dyſen-

tery. The boils and large white bladders, that were obſerved towards the end of the epidemy, in thoſe that remained free from the dyſentery, were beſides well worth notice; theſe, however, ſhewed alſo a corruption of the humours.

In the putrid fever, all depended on the ſpeedy evacuation of the bilious matter. The fever kept off, as ſoon as the corrupt matter was for certainty purged out of the body; ſo that after this manner, the cure of this otherwiſe dreadful diſorder, appeared to me not in the leaſt difficult, for I have cured a great many putrid fevers, in two, three, four, five, and ſix days: a ſtrong proof that a good method of cure is the beſt ſpecific. I made no ſcruple of procuring farther evacuations, when the danger appeared very great, and other phyſicians would have abſolutely given the patient over to his fate; for in the greateſt weakneſſes, I gave emetics with the beſt effects, on the eleventh, and even after the twentieth day. I have alſo taken away bad conſequences of the putrid fever, by purgatives; for example, an extraordinary obſtinate cough, with the ſulphur auratum antimonii: all this happened with the ſame ſucceſs in the dyſentery.

In the putrid fever, I reckoned among my capital remedies, ipecacuanha, tamarinds, cream of tartar, all vegetable acids, and the ſulphur auratum antimonii: in the dyſentery, theſe ſame remedies had the beſt effects, and inſtead of ſulphur auratum antimonii, I made uſe of the vitrum ceratum, with the greateſt ſucceſs.

In the putrid fever, I was under the greateſt apprehenſions, when every thing inclined for the beſt, as at that time the patient, or the aſſiſtants, very eaſily committed an error in the non-naturals, that became mortal: I feared the very ſame thing, for like cauſes, and with equal reaſon, in the dyſentery. For in the putrid fever, I found wine, juſt as in the dyſentery, very hurtful and dangerous.

But I diſcovered the moſt ſtriking reſemblance between our putrid fever and dyſentery, in the manner, in which, after the uſe of the beforementioned remedies, the ſymptoms of the putrid fever vaniſhed by degrees; and on the neglect of theſe, or uſe of medicines of a contrary nature, became obſtinate, and again got the upper hand: in ſhort, in the manner in which they appeared under different ſhapes, and degenerated into the moſt dreadful ſymptoms, when the

patient did not do his duty, ſo well as the phyſician.

From this perfect reſemblance of the putrid fever with our dyſentery, we can therefore moſt clearly determine the ſpecies of this laſt mentioned diſorder. The reader ſees, without my reminding him, that our dyſentery was accompanied with a bilious, or, as it is called, putrid fever.

As the putrid fever was only catching in certain circumſtances, ſo our dyſentery was of itſelf not contagious. I have ſeen a great many people keep company with the ſick, without any detriment to themſelves; but many followed at the ſame time the advice I gave them for avoiding the infection; ſeveral did not follow it, and yet were not infected. In many houſes almoſt every body was ill, and that not at once, but one after another; in many, I ſaw only one perſon ſick. I do not indeed wonder, that one ſhould be infected, and another not, as the conſtitution of the body, and even of the mind, can make one man much more ſubject to infection than another. The power of contagion in the dyſentery, is alſo very different; while in an epidemical dyſentery, that is, otherwiſe attended with a putrid fever, the diſtemper may differ very much, according

cording to the degree of the putrefaction; all thoſe that were dangerouſly ill of our dyſentery, had the putrid fever in the higheſt degree; on the contrary, in ſome gentle caſes, many had not the leaſt ſymptom of it, nor were their ſtools in ſo great a degree offenſive. Now the contagious power of the dyſentery, lies chiefly in the excrements; for the mere ſmell of them, has often communicated the dyſentery to men in perfect health, and even beaſts; Dr. Pringle even ſaw one that proceeded from the bare ſmelling to blood that was putrified, by being kept in ſtopt bottles; as in general the effluvia from putrid blood, are more apt to cauſe a dyſentery, than any other malady. And even though one ſtop one's noſe, one is not ſecure from infection; for the putrid vapours adhere to one's cloaths, and when they are in a high degree contagious, are thus communicated from one perſon to another; while, at the ſame time, he that has the cloaths on his back, is perhaps not in the leaſt infected. The fœtus was naturally infected in our dyſentery, when the mother lay ſick of it herſelf: a woman in the city of Frawenfield, that was troubled with this diſorder, a fortnight before and after ſhe was brought to bed, brought her child likewiſe into the world infected with the ſame, and it died three days after: but this caſe proves nothing at all. In general, it ap-

peared to me, that our dyſentery became contagious purely through naſtineſs, and the crouding many people together in a ſmall ſpace, but was by no means ſo of itſelf; for though many were attacked with it at once, this ſeems to proceed from a more univerſal, and widely different cauſe, which operated at once on every one.

After this exact determination of the ſpecies, under which our diſtemper ſhould be ranged, I betake myſelf, with the greateſt fear and caution, to enquire into its remote and proximate cauſes, as they are called. People of narrow capacities, who think that learning conſiſts in knowing every thing, will be very ill content with this enquiry. I on the contrary, muſt here in many things, as on moſt ſubjects in every thing, confeſs my ignorance; ſince it is much wiſer, as well as better, to obſerve narrowly the works of nature, than to explain their cauſes by arbitrary hypotheſes.

The weather this year ſeemed perfectly favourable to this dyſentery. The air was in June very inconſtant, but for the moſt part humid; and when the ſun broke forth, there enſued a ſuffocating heat: July was full as changeable; but the heat never roſe to ſo high a pitch: Auguſt was, during the better half, cloudy and rainy;

rainy; afterwards the days were fine and very warm, and at the ſame time the nights extremely cold: till the middle of September, and longer, the ſky was continually clear; at noon, it was extraordinary hot, in the morning, evening, and chiefly throughout the whole night, intolerably cold, afterward the air grew foggy, damp, and cool; and we had fine weather and rain by turns: October was very variable, though for the moſt part cool; and the cloſe of the month was ſtormy, rainy, and pretty cold. By means of theſe great changes from heat to cold, the perſpiration was by turns firſt promoted, and afterwards on that very account the more violently checked; thus the putrid ſcum of our bodies remained for the moſt part behind, and was forced to empty itſelf into the inner cavities. I have, indeed, remarked, that thoſe chiefly were taken with the dyſentery, who after having very much heated themſelves, cooled themſelves directly after; eſpecially ſuch as drank great quantities of cold water, when they were in a profuſe ſweat. This ſeemed to be the reaſon, that moſt of our peaſants fell ſick of the dyſentery.

In general, it is not the cold that follows on heat, and remains, but that which ſucceeds heat, and gives place to it by fits, that is conſidered as the cauſe of the dyſentery. The cold

air before ſun-riſe, which is followed by a ſcorching heat at noon, after which the nights are again cold and damp, are thought to be the principal occaſions of the malignant diſeaſes of the army in Hungary; and in particular, the reaſon why autumnal fevers and dyſenteries are more frequent and violent in that country than elſewhere. Now we had, this year, ſuch weather for the moſt part, where the dyſentery was moſt violent; but in a great many places, in the ſame weather, and at the ſame time, it was not remarked; it came on alſo, when this change from heat to cold was not at all obſerved. Sometimes it made its appearance, when in the beginning of the ſpring, a ſudden heat enſued after a great cold; and on the contrary, the paſſengers in the Dutch ſhips, ſaw both the diarrhœa and the dyſentery increaſe, in proportion to the coldneſs of the countries they paſſed through; though otherwiſe, the epidemy of the dyſentery was moſtly ſtopt by the approach of the cold. The hippocratic (if I may be allowed the phraſe) ſoutherly winter of 1764, appeared to us to have occaſioned the great quantity of putrid fevers with which we were plagued; but other winters, to which it bore a perfect reſemblance, did not bring theſe fevers on, and we have putrid fevers even in the coldeſt ſeaſons; for the extraordinary cold winter, in the beginning

ning of the year 1766, was exactly the time in which the putrid fever, especially the putrid pleurisy, and even the malignant fever, raged more violently in Switzerland than ever they had done before. Generally speaking, the same disorders do not always show themselves in the same weather; and disorders, that perfectly resemble one another, often make their appearance in totally different kinds of weather. I cannot therefore comprehend, why some people explain the manner and ways, in which a certain particular state of the air has given rise to a particular epidemy, with as much confidence, as if it could not possibly be otherwise. All that I can therefore conclude with any precision, from the before-mentioned observations, is this; that cold alternating with heat, certainly contributed very much to our dysentery.

But the reason why this malady did not, in like weather, break out in so many other places, is to me unknown. Without doubt or contradiction, this year's dysentery arose from a corruption of the humours; as an exact observation of the disorder, taught me in the clearest manner. It is full as obvious, that a certain concourse of causes, before-hand internally existing in the human body, is requisite to produce a disease, that nevertheless attacks it suddenly;

for without ſuch a concourſe of internal cauſes, every one would certainly have had the reigning malady, and in the ſame degree. This union illuſtrates at once many undetermined, and in part, contradictory notions; and the conſideration thereof, appears to me one of the principal objects of our art: where this exiſts, a man is attacked, and where it is not, remains free. I have remarked, that where the putrid fever does not reign, thoſe that are ſubject to much vexation, and the excretion of bile that proceeds therefrom, are ſeized, rather than others, with that diſorder. The moſt inconſiderable external cauſes are capable of producing the greateſt effects, when joined with internal, already preſent.

It is allowed, by almoſt all the moſt learned phyſicians in Europe, that the dyſentery (that is, with their leave, the dyſentery attended with a putrid fever) is brought on by thoſe cauſes, that make our juices very putrid, and incline their courſe principally towards the inteſtines.

The camp dyſentery ariſes, for the moſt part, from a repulſion of the perſpirable matter; when the ſoldiers lie in the field in all kinds of weather, and muſt do their duty, at the ſame time that their humours are grown thin and ſharp, through

through the intenſeneſs of the heat. In general, it ſhows itſelf juſt after the armies begin to appear in the field, grows often frequent and conſiderable ſo ſoon as the end of June, ſtill more ſo toward the end of July, and thus remains till the troops go into winter quarters. In the night after the battle of Dettingen, the 27th of June 1743, the Engliſh ſoldiers lay on the field of battle without tents, expoſed to a heavy rain; and the next night likewiſe, after marching to Hanau, lay again in the open field, on wet boards, without ſtraw. The ſummer had begun, and the heat had been hitherto great and continual; but the free and uninterrupted perſpiration, that was the conſequence of this continued heat, had till then prevented the riſe of any epidemic malady. But now the pores of the ſkin were ſuddenly cloſed, the humours tending to putrefaction were tumid in the bowels, and occaſioned a general dyſentery, which laſted a great part of the ſummer, and in a few weeks had ſeized almoſt half the army. Such of the officers (among whom, indeed, it was not ſo general) as had lain wet at Dettingen, were attacked by it firſt, the reſt received it by contagion; but a regiment that had not lain in the damp, nor been expoſed to the rain, remained perfectly free from it, at a ſmall diſtance from the camp, though (excepting that they were not ſubject to

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the contagious effluvia of the reſt) they breathed the ſame air, eat the ſame proviſions, and drank the ſame water.

According to Dr. Pringle's obſervations, the dyſentery rages without interruption, in camps that are perfectly dry and airy, after a continued and violent heat. But in ſuch a camp, beſides the natural damp of a tent, theſe people muſt be often expoſed to wet floorings and cloaths, and to the chill and damp air of the night. The occaſion of theſe diſorders is the more inevitable, as in the field the variations from heat to cold, are much more ſenſible and frequent than in quarters.

The dyſentery is ſeen in all parts, where after much heat, the perſpiration is ſtopped, not only by means of a wet floor, or miſts and dews, but alſo of damp cloaths. In the warmeſt countries, the dyſentery reigns when the weather is rainy; and in all climates that are ſubject to conſtant rains, this diſorder ſhows itſelf very often. It returns alſo every time one catches cold, after a ſeeming, and often, a perfect cure. Baron Van Swieten thinks, with the greateſt reaſon, that cold ſeizing the body when it is heated, has killed more than the plague.

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With theſe external cauſes, internal may alſo concur. Theſe compoſe the ſeminium of the diſorder, and may lay awhile lurking in the body, till they break out on the perſon's catching cold. In ſummer, not only the ſolids are relaxed, but alſo the juices, through the intenſeneſs of the heat, incline to putrefaction; now, when a ſudden ſtoppage of the perſpiration ſupervenes on relaxed fibres, and a putrid ſtate of the blood, it is no wonder that a dyſentery ſhould be the conſequence of this acrimony, formed within the body. Of all our humours, the gall is principally ſubject to putrefaction. Hippocrates, indeed, aſcribes the diſeaſes of ſummer and autumn proceeding from this cauſe, to a redundancy of bile; but moſt other writers, to its putridity; ſo that as well of old, as ſince, theſe diſorders have been in general called bilious. Now we learn from a number of obſervations, that in the bodies of ſuch as have died in the dyſentery, the bile was faulty, as well in quantity as quality; that either none was there, or that which was there, was perfectly acrid and corroſive. We may therefore take it for granted, that the bile in ſummer time, if not more abundant, is yet at that time more corrupted than uſual; and that this circumſtance, if it be not the primary cauſe, is, at leaſt, the conſequence of all ſummer and autumnal diſorders, and increaſes

creaſes their malignity. In a very general and epidemic dyſentery, an acrid and corroſive bile has commonly the moſt conſiderable ſhare; ſo that our dyſentery ſeemed to me, nothing more than a particular determination of the very ſame corrupted humours, which occaſion our putrid, or rather bilious fever.

From all this enſues, that the ſtate of the air during this year, conduced very much to our dyſentery; that likewiſe this dyſentery proceeded from a putrefaction of the juices, which in particular caſes, is very eaſy to explain; the general cauſe of which however, I, conſcious of my own ignorance, leave to others to determine.

The proximate cauſe of our dyſentery, the manner and wiſe in which it ſhowed itſelf in the body, and its effects, can now be declared with greater eaſe and probability. I ſaw, with my own eyes, that a corrupt, putrid, and bilious matter, lay in the ſtomach and inteſtines, cauſed great pains, and at firſt upwards, and afterwards downwards, ſought an exit out of the body. Now it is well known, that the bile, from various cauſes, may be ſo altered, and put on ſuch a ſharp, putrid, and acrid nature, as, like a poiſon, to corrupt the whole body; for from this corruption, either inflammations, ulcers, and gangrenes,

grenes, take their riſe, or all the juices in general fall into the like putrefaction in divers degrees, and produce miliary, or petechial eruptions; ſometimes it happens, that the gall of itſelf affects this ſharp, corroſive, and perfectly poiſonous nature, and thus infects the other juices of the body. Sometimes this is preceded by an acrimony, formed in the blood, whether it proceed from contagious vapours, (as happens when many ſick perſons are crouded together in our military hoſpitals) or from what other cauſe ſoever, and this corruption is communicated to the gall. The remark, that the dyſentery has ſometimes owed its origin to the bare ſmelling to blood, that was putrified by being kept in a ſtopt bottle, makes good, thus far, that expreſſion of Sydenham's, who calls the dyſentery a fever that has thrown itſelf on the inteſtines.

Now when once ſuch an extraordinary acrid matter is in the bowels, it is very intelligible, that theſe extremely ſenſible parts muſt be very much irritated. This irritation communicates itſelf to the ſtomach, which gives riſe to vomitings; in the bowels each irritation provokes a greater conflux of the moſt liquid parts of the blood through the inteſtinal glands into the inteſtines, whence ariſes a purging. Now this conflux may, without doubt, be exceedingly great,

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as we know from anatomy, that beſides the larger glands, the liver, and the gall-bladder, there are an infinite number of ſmall paſſages over the whole ſurface of the bowels, through which even the moſt unuſual things can paſs out of the blood into the bowels, and that a continued and ſtrong irritation of theſe innumerable paſſages, occaſions an incredible flux of the humours into the bowels; and this again ſuch an incomprehenſible purging, that at ſight of the evacuations, one is apt, not very improperly to ſay, that their whole inſide is coming out at their fundament. In this manner, in our dyſentery, above forty pounds of a watery matter has been ſeen, in one day, to come away by ſtool.

From theſe phænomena, we are enabled to explain the reaſons of the dreadful pains in the belly, and other ſymptoms. The bile does not always occaſion the pain; as there are dyſenteries, in which the patients void not the leaſt bilious matter; and, as in the putrid fever, very ſeldom a pain ariſes, from the mere preſence of this matter in the inteſtines. But yet the belly-ach in the dyſentery is very often at firſt a conſequence of the irritation of the acrid and putrid humours in the bowels, and of the ſpaſmodic contractions in thoſe parts, produced by that irritation: in the progreſs of the diſorder, it is the conſequence

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of the abſence of their natural mucus, which makes the bowels, deprived of this mucus, more and more ſenſible to each freſh irritation; ſo that the greater acrimony of this matter, and its being accompanied with a fever, diſtinguiſh the dyſentery from the diarrhœa. The teneſmus is the effect of an irritation in the inteſtinum rectum, the prolapſus ani of the teneſmus, and the ſtranguary of an irritation in the neighbouring parts.

But the excrements in the dyſentery, of which we treat at preſent, do not merely conſiſt of corrupted gall; beſides, all that a man voids of a green or yellow colour, is not pure gall, ſince one drop of bile colours an aſtoniſhing quantity of water. They are very often white, and perfectly reſembling pus; though it is for the moſt part a great error to take this matter for pus. For it is well known, that the inteſtinal glands, in the ſame manner as thoſe of the urine-bladder, when torn with the ſtone or gravel, are capable of yielding a greater quantity of fluids, and thoſe of a quite different nature than in health; this humour is in both caſes a ſlimy white matter. On comparing theſe remarks with the foregoing, it is manifeſt, that ſtools of this kind may be produced, by an acrid bilious matter adhering to the bowels; and that, as my obſer-

vations in the firſt chapter ſufficiently ſhew, in a bilious dyſentery attended with a putrid fever the excrements may be even perfectly white. From this appears, by the bye, how ridiculouſly ſome people conſtitute different ſpecies of the dyſentery, from the different colours of the excrements, and treat them by quite different methods.

The particles of fibres and membranes, that often come away in the dyſentery, hanging ſometimes a foot long from the poor patients, and are conſidered as the inner coat of the inteſtines, are in reality very ſeldom any part of them, but often nothing elſe than an inſpiſſated mucus. Great anatomiſts have demonſtrated to us the paſſages, through which this mucus comes into the inteſtines; and withal, that a ſubſtance can come out of the blood into them, by which this mucus is coagulated, and under the appearance of a fleſhy, membranous, or fat body, paſſes into the ſtool, when, at the ſame time, not the leaſt ulcer in the bowels is to be perceived. I do not, however, deny, that the tunica villoſa of the inteſtines, is not alſo ſometimes abraded, and comes away with the excrements. I am likewiſe ſenſible, that the bowels are in this diſorder apt to be ulcerated; but ſo late, that this matter is changed into a putrid thin pus, or is ſo con-

confounded with blood and mucus, that one cannot poſſibly ſee it. Hence we may perceive, how often phyſicians deceive themſelves and others; when they, in the very firſt days of the diſorder, miſtake the forementioned mucus for pus, the fibrous and membranous ſubſtances for ſigns of the laceration of the internal tunic of the inteſtines, or of an ulcer in thoſe parts; and thus in a bilious dyſentery attended with a putrid fever, entirely omit purgatives, and give the patient over to death.

The bilious, putrid, and corroſive matter, incloſed, as it were, in the cavities of the inteſtines, irritates them ſo much; that often, the openings of the blood-veſſels into the inteſtines are widened; ſo that pure blood runs out, and mixes itſelf with the ſtools. Thus there may be blood in the excrements, without the leaſt perception, or even ſuſpicion of inflammation in the bowels; it may alſo flow in great quantities, without their ſuppuration enſuing: hence appears the reaſon, why, when even the excretions are bloody, there is no need to be afraid of expelling the bilious irritating matter with a vomit and purges, and why it ſo often arrives, that a vomit alone puts a ſtop to this flux of blood. Nor is an internal heat, which the egregious Mr. Rahn, in his work on the dyſentery,

affirms to be an infallible mark of a violent inflammation of the bowels, any more a ſign thereof, than bloody ſtools; for I have removed this ſymptom likewiſe by means of tamarinds, which evacuated the corroſive bilious matter; while, in caſe of the ſlighteſt inflammation, this ardor had been violently increaſed.

Notwithſtanding what we have ſaid, a bilious dyſentery (or the dyſentery attended with a putrid fever) may turn to an inflammation of the inteſtines and a gangrene, in the ſame manner as a putrid fever very often ends in a gangrene of thoſe parts. Stools perfectly black, and of a cadaverous ſmell, cold ſweats, the hiccough, and delirium, are conſidered as tokens of a gangrene in the bowels; and perhaps it is not eaſy to find an epidemical dyſentery, in which, towards the end, the bowels are not inflamed. Almoſt in all parts of the primæ viæ, inflammations, ſuppurations, a number of ulcers and gangrenes are found after the dyſentery; but in every one, theſe evils are conſpicuous in the rectum and inteſtina craſſa, which, for the moſt part, are putrid and mortified. Sometimes ſmall puſtules have been ſeen in the bowels, which came away even during the patient's life, and were full of a putrid ſtinking matter; and in the inteſtina craſſa, little aphthæ, that bled when preſſed,

preſſed, and looked like the flat kind of ſmall-pox, when this diſorder is at the higheſt, but with this difference, that they were ſolid and without any cavities; they conſiſted of the two innermoſt tunics of the inteſtines, that grew one within the other, and were incraſſated by the inflammation: the firſt of theſe was covered with a black mucus, and black ſpots were likewiſe partly viſible on it; ſometimes the meſenteric glands are ſwelled, relaxed, filled with a bad kind of pus, and very nearly mortified. Nay, after tedious dyſenteries of long ſtanding, inflammations are often found in the rectum, in the reſt of the inteſtina craſſa, ſometimes in the ſmall inteſtines, and even in the ſtomach.

The teneſmus, however, ought very ſeldom to be conſidered, as a ſign of an inflammation of the inner coat in the extremity of the rectum, or of an ulcer in thoſe parts. Great anatomiſts are of opinion, that what ſtimulates the rectum to evacuation towards the end of a dyſentery, is no particular affection of the gut itſelf, but the remainder of a ſharp humour, and ſometimes of the blood itſelf, (when the excrements are of a dark-red colour;) in the next place, that this reſiduum may ſtay awhile in the cavity of the great guts, and by degrees be puſhed into the rectum and ſo towards its extremities, which are, at that time,

very ſenſible to this irritation. Yet, it is not without reaſon, that from a violent teneſmus remaining after the dyſentery, ſome people have ſuſpected an exulceration of the rectum, or ſome other conſiderable complaint; as the ſequel has ſhewn this aſſertion to be true. A teneſmus has been really known to proceed from an inflammation of the rectum, that laſted ſeveral days, ſometimes a week, and longer, and was afterwards followed by a greater or leſs excretion of a yellow pus, upon which the teneſmus ceaſed.

This eſſay towards an explication of our diſorder, with all its imperfections, may not perhaps appear totally uſeleſs, when the influence of ſuch reſearches on the cure is conſidered; and thence is perceived, how ſenſeleſsly phyſicians of an ordinary caſt, on occaſion of ſuch enquiries, pour out a volley of abuſe againſt theory.

CHAP. III.

The Curative Indications, Diet, and Prophylactic Remedies.

THE foregoing explication of our diſorder, diſcovers, at the ſame time, the indications towards its cure. Firſt of all, an enemy of itſelf ſo dangerous, and which would become

become ſtill more ſo by a longer ſtay in the body, ſhould be quickly expelled from it, and the putrefaction, at the ſame time, be reſiſted in the beſt manner poſſible.

In no malady does nature ſooner get the ſtart of art than in this, if one does not in the very beginning take care to do, what is often afterwards too late to be done. The morbific matter of a dyſentery of this kind, has been likened to a rotten egg, that given to the quantity of a few grains, occaſions a violent and continual vomiting: the putrid ſtagnating gall is not leſs venomous, for which reaſon, it ſhould be without delay driven out of the body. White and red miliary puſtules, and even petechiæ, are, in putrid fevers, an effect of the putrid matter that has paſſed into the blood; the ſame evils are produced from like cauſes in the dyſentery. Not to evacuate, or correct immediately this matter, is to produce the miliary eruption that is ſo often mortal; but theſe excrements never break out in the bilious dyſentery, and ſeldom in our putrid fevers, when evacuations are procured in proper time and quantity. Add to this, that the greateſt phyſicians allow it to be moſt commonly difficult, and often quite impoſſible, to cure a dyſentery of ſome weeks continuance.

We muſt therefore, not only abſtain from the pernicious practice of ſtilling the diſorder in the beginning, before we look out for more effectual remedies; but we ſhould alſo take care above all things, not to ſtumble on ſuch remedies as may retain in the body, an enemy ſo extremely dangerous. In ſevere caſes of the dyſentery, the forces of nature never ſuffice alone to expel the putrid matter out of the body, though nature endeavours to do it by this very way: and in all caſes, it is contrary to her intention to retain it. The obſervation, that inflammations are apt to ariſe, in diſeaſes of a putrid nature, and that in moſt of thoſe, who die of the dyſentery, the bowels are inflamed, indicates in like manner, that every thing ſhould be avoided in this diſtemper, which immediately produces fevers and inflammation.

Theſe indications towards the evacuation of the putrid matter I purſued with emetics, given directly at the beginning, when nothing particular hindered. Nature herſelf pointed out this way, as almoſt all that were taken with the dyſentery, had, at the beginning, a continued propenſity to vomit: many vomited, and that with benefit. I choſe gentle medicines, as with theſe we can effect as much as one can wiſh: I gave theſe emetics, even at a time when the ſtools were very bloody; as I ſaw that leſs blood came away af-

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terwards: I even gave a vomit very late, when I was called late, and no evacuations had been previouſly made. I always omitted the vomit, when there was the leaſt ſuſpicion of inflammation, or when circumſtances of a quite different nature forbad it; as, for example, a rupture; or likewiſe in caſes of very young children, by reaſon of the parents fears; for which, however, in other maladies of ſuch infants, I have ſince ſhewed leſs indulgence; and particularly in the hooping cough, in 1766, with the greateſt ſucceſs.

After the emetic, I purſued theſe ſame indications with purgatives. Theſe were indiſpenſibly neceſſary, as the acrid putrifying matter, that lay burrowing in the inteſtines, from the prolongation of its ſtay in the bowels, grew more and more acrimonious, irritating, and apt to ſpread the putrefaction in the body, or to cauſe inflammations in the inteſtines. The bloody ſtools did not hinder me from giving purges, as I ſaw that they cleared the bowels of the acrid matter and that no more blood appeared in the ſtools, as ſoon as this matter was quite evacuated. I gave theſe purges, as long as there were any indications of an acrid putrid matter in the bowels, without inflammation or ſuppuration. But theſe purges were always of a gentle nature, and, to chuſe, of the acid kind;

as ſtrong purgatives in the dyſentery always occaſion an intolerable cholic, and greatly weaken the patient; and cathartics of an acid nature do not only for the moſt part evacuate the putrid matter, but alſo withſtand any putrefaction that may ſtill remain in the body.

This was the chief thing to be attended to, after, and even during the evacuation. The putrid venom ſhould be oppoſed, and the humours of the body preſerved from the like corruption. Quite above the prejudices of the vulgar, and indeed, of great phyſicians, particularly thoſe of Dr. Degner, I gave with this view immediately in the beginning acid ſalts, not only in ſmall, but alſo in very large doſes. I followed likewiſe this plan in the diet I preſcribed to my patients.

The pain could not be more effectually relieved, than by taking away the ſharp corroſive matter. Yet was this ſometimes ſo very abundant, that in ſpite of all evacuations, enough remained behind to keep up the diſorder, and excite the moſt intolerable pains. In theſe caſes I very ſeldom made uſe of anodynes of the narcotic kind, and never without the greateſt caution and reſerve. But in theſe and all other circumſtances, I was extremely attentive to aſſiſt the

bowels

bowels with a proper quantity of ſoft and mucilaginous liquors; ſince except in the caſe of inflammations, theſe pains are ſolely to be aſcribed to the preſence of an extremely acrid matter in the inteſtines, which irritates them to ſpaſmodic contractions, and to the loſs of their natural mucus in the courſe of the diſorder.

The methods I took to fortify the ſtomach and bowels, after the dyſentery, conſiſted in making choice ſometimes of ſuch remedies, as, while they ſtrengthened, promoted ſome degree of evacuation, and at other times of ſuch as ſtrengthened without heating. For the moſt part, I had no indications at all of this ſort to purſue, as my patients recovered their ſtrength of themſelves.

The diet was in general regulated by the cauſe of the diſorder, and the peculiar circumſtances of the patient. With regard to the air, I was extremely careful to have it always freſh in the chamber; though I gave them great caution with reſpect to taking cold, which is of ſo much prejudice in this malady. With regard to victuals and drink, I took care, above all things, to avoid every thing that promoted putrefaction; though at the ſame time, I enquired narrowly into the nature of thoſe kinds of food,

that

that are reckoned to promote or reſiſt putrefaction; for, though Degner had in the dyſentery at Nimeguen, which was of the putrid, (as it is called) or bilious ſpecies, the ſame indications to oppoſe putrefaction, yet he allowed his patients different kinds of fleſh-broths, which, however, promote it, and eggs, which are manifeſtly of a putrid nature. Our excellent countryman, indeed, Mr. Conrad Rahn, adviſes chicken and veal in the dyſentery, as he imagines that they expel wind. But this entire new diſcovery was at that time unknown to me; beſides, I do not ſee why one ſhould think on carminatives; and once for all, any fleſh of what kind ſoever, is hurtful in all putrid and inflammatory fevers; as in the former they increaſe the putrid corruption of the humours, and in the latter, ſtill more incraſſate the blood already of itſelf too thick and viſcid: accordingly I forbad all fleſh and fleſh-broths, as well as eggs, which are ſo much recommended by all phyſicians. As for Mr. Rahn's indications towards expelling the wind, I did not follow them at all; for the wind in the dyſentery (which however I have ſeldom obſerved) is the immediate effect of putrefaction: as, according to Dr. Pringle's experiments, putrefied animal ſubſtances do not only of themſelves produce air, but likewiſe excite a violent fermentation in all vegetable foods,

foods, and I could not comprehend how putrefaction could be hindered by veal, when all fleſh ſo evidently promotes it. On the other hand, I found that carminiatives were eſteemed in the dyſentery, on account of their having been found ſerviceable in pains of the bowels, proceeding merely from wind; and hence it was very abſurdly concluded, that they would be of like ſervice in tormina that proceed from quite different cauſes. I therefore forbad cummin ſeeds, and cummin ſauce, as likewiſe the drink the Italians are ſo fond of, made of a decoction of coriander ſeeds; but in particular all hard and indigeſtible food. With a general view to hinder putrefaction, I forbad all fat, butter and oil. On the contrary, I ordered to all my patients barley-water and rice-gruel, and with each I mixed, for the moſt part, cream of tartar; after the purge, I gave a preparation of barley, which is nothing elſe than barley-water boiled down to a thick and ſtrong conſiſtence, and ſtrained through a cloth: this ſerved the patients inſtead of victuals, and when they choſe, for drink.

With regard to waſhing away, and attenuating the bilious acrimony, I conſidered copious drinking as very ſerviceable. Indeed, ſome old women of the laſt century, were of opinion, that a great

part

part of the cure in the dyſentery, conſiſted in abſtaining from drinking, which, in their opinion, increaſed the purging; and that thoſe were the eaſieſt cured, who could ſuffer thirſt with the greateſt patience. But the experience of latter years has taught us, and very great phyſicians, Baglivi, Huxham, and Tiſſot, have advanced, that copious drinking is no where more neceſſary than in the dyſentery. Water, once ſo much deſpiſed, is, when drank in great quantity, an univerſal remedy in this malady, bilious diſorders, and ardent fevers. In the cholera morbus, as it is called, or continual vomiting, Dr. Degner himſelf drank, in the ſpace of twenty-four hours, four and twenty pints of warm water; and again in fourteen hours, forty-eight pints more; and again in two hours, near thirty pints, with the greateſt benefit. To be ſure one has need of an Herculean ſtomach, to bear a deluge of this kind. In the mean while, thus much is certain, that the drinking of warm water in the dyſentery, is of great ſervice; and that a vaſt quantity of dyſenteries were cured, only by taking a tea-cup full of warm water every quarter of an hour. In like manner I allowed whey in great plenty, and rather preferred it to water, and my patients found it agreed with them very well. Cold liquor was, in the beginning of the diſorder, al-

ways noxious; on the contrary, warm drink not only does no harm, but alſo waſhes out the inteſtines better, and paſſes eaſier through the meſenteries and lacteals.

Every thing that was capable of binding or heating, I forbad. I diſapproved of milk, cream, oatmeal, rice, and acorn-gruel; inſtead of oil, I made uſe ſometimes of an almond emulſion, and a ſolution of gum arabic. I utterly condemned all kinds of paſtry, cheeſe, ſpice, ſpirituous liquors, and eſpecially wine. I gave alſo ſtrict orders againſt holding the ſtools in the body, as a very pernicious practice: though theſe various orders and prohibitions, appeared in the eyes of our people, an extremely ſtupid and damnable hereſy.

I conſidered cleanlineſs as a thing of the utmoſt importance in the cure of the dyſentery. I took care of this in all reſpects, and adviſed, that the childrens clouts ſhould be carefully waſhed.

Thoſe that were getting well, I allowed as much boiled fruit as they choſe, with lemons and lemon-juice, together with the gruels before-mentioned; or alſo, when they were further advanced, a light food, compoſed of almonds,

monds, milk, the white of an egg, and ſugar. After ſevere illneſſes, I adviſed them to regulate themſelves for ſome weeks, juſt as if they in reality ſtill had the dyſentery; and I repeated to them over and over enough to make them ſick, that errors in diet, and eſpecially an obſtruction of the perſpiration, from expoſure to a moiſt air, for the moſt part cauſe a relapſe, and the ſecond illneſs is always more dangerous or more tedious than the firſt.

According to the obſervation of Dr. Moehrlin, of Ravenſburgh in Swabia, a ſtrict diet was not only of the greateſt ſervice in curing the dyſentery; but alſo after a full remiſſion of the purging, for at leaſt a week or longer, (notwithſtanding a return of appetite) the ſtomach ſhould not be burthened with food; as otherwiſe the cure would be retarded, or a relapſe enſue. Afterwards a milk diet agreed very well with his Swabiſh patients, but fleſh meats very ill, for ſome weeks after; and even good ſtrong-bodied wine, was the laſt thing that Dr. Moehrlin found his convaleſcent patients could bear.

The preſervative remedies were inſtituted according to the moſt accurate obſervations and experience.

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At the time, when uncommonly cold nights came on after very ſultry days, I adviſed my acquaintance not to heat themſelves too much in the day-time, and either not to go out at all after ſupper, or if they ſhould, to cloath themſelves very warm. I myſelf in the month of September, on account of the great heat of the day, was ready to faint away, when I arrived at the chambers of ſuch of my patients as lived at any diſtance; accordingly in the day-time, I wore the thinneſt and lighteſt cloaths; on the contrary, I was obliged in my night viſits, to wrap myſelf up cloſely in the thickeſt cloth. I ordered the peaſants in particular, not to lay themſelves down and take their naps, according to their laudable eſtabliſhed cuſtom, on damp floors.

Experience has ſhewn, that the ſmell of the patients was leaſt dangerous, that their breath was worſe, and their ſtools worſt of all; that a ſhivering is commonly the firſt effect of the infection, and that a vomit is of ſervice in ſuch circumſtances. In the chambers of the ſick, I generally kept a window open all day long; or ordered them to be aired twice a day, by opening the door and windows, with the bed-curtains drawn; and the air to be frequently purified beſides, by pouring vinegar on a hot iron fire-ſhovel. In the villages, I ordered the excrements

excrements to be taken out of the houſe as often as poſſible, and thrown into deep pits, digged for this purpoſe in the meadows, at a proper diſtance, and every time covered with freſh earth. In the interim, I bad them cover the ſtools up cloſe that remained in the houſe; and very ſtrictly forbad the peaſants to throw them on the dunghill, or into the ſtreets. I prohibited thoſe that were in health from lying with the ſick, or eaſing themſelves on the ſame cloſe-ſtools, as the ſick uſed. I took care that theſe laſt ſhould often change their linen; I commanded likewiſe, that they ſhould take a precaution here very neceſſary, namely, not to keep the dead bodies too long in the houſe, or at leaſt to carry them to a ſeparate and cool place. It is of importance alſo, to interr the corpſes in deep graves.

As a very good preſervative, I adviſed thoſe that were in health to eat leſs fleſh meat; and on the contrary, as much fruit and grapes as they choſe; as to the reſt, to keep to the moſt digeſtible food, and of all things to drink wine; as it is a preſervative againſt fear, and makes the uſe of the cooling prophylactic remedies ſupportable even by weakly perſons; whence it limits the application of the maxim, that every thing that generates wind and relaxes, inclines the body to putridity.

putridity. I could not too often repeat to the peaſants, that after having heated themſelves, they ſhould not pour warm water too ſoon, and in too great quantities, into their bodies. Dr. Moerhlin remarked in Ravenſburg, that thoſe were either not attacked by the dyſentery, or elſe had it very ſlightly, who eat little, drank ſtill leſs, and that not cold; and kept their bodies in a ſtrong perſpiration, as well in the day-time, as eſpecially in the night, carefully covering themſelves all over with the bed-cloaths.

I gave the nurſes, when they were in imminent danger of being infected, a vomit, with the beſt ſucceſs; to others tincture of rhubarb, and to moſt that aſked for it, cream of tartar. I was myſelf, from too great fatigue and vexation, in the beginning of the epidemy ſeized with a violent pain in the belly, and an evacuation of an atribilanious ſpumous matter: this indiſpoſition returned a ſecond time, and went away each time as faſt as it came; my only preſervative conſiſted in ſtrong doſes of cream of tartar, and in a certain indifference with regard to the diſtemper, whenſoever it ſhould attack me. In general, in this as in all other epidemic diſorders, one of the beſt, though (to put in practice) one of the moſt difficult prophylactics, is, not to be afraid. For fear is more pernicious, than the very worſt condi-

tion of the air; it gives the reigning diſeaſe to thoſe that are in health, and very often kills the ſick, when another, whom they have loved, has died before them. This paſſion and grief produce ſhocking effects on the healthy, and infinitely worſe on the ſick.

CHAP. IV.

General and particular Methods of Cure, and their Effects.

THE principal indication in each patient, was the quick evacuation of the corrupt bilious matter.

In the beginning, I effected this by a vomit, that conſiſted at moſt of forty grains of ipecacuanha, and the weight was diminiſhed in proportion to the age and other circumſtances of the patient. I ordered it to be taken in a ſpoonful of warm water, or weak camomile tea, drinking two tea-cups full of the ſame immediately after, and as often as the vomit enſued, repeating the like quantity of the drink.

Stronger emetics than theſe, I did not find fit for my purpoſe; with milder I ſhould have done nothing at all; beſides it is well known, that ipecacuanha does not relax the ſolids, while it empties

empties the ſtomach and abdomen, and that it has ſomething in it that makes it preferable to others. The new manner of giving it in ſmall doſes, does not always ſucceed, and it often operates very roughly; though it muſt be allowed, that for reaſons very obvious, ſmall doſes have ſometimes as much effect as great: given in the manner as I gave it, it excites the vomiting three or four, or even eight times. This vomiting took away the ſickneſs, and the more gall there came away, the more ſervice it did; I have even on the third day of a confirmed, though not very violent dyſentery, with forty grains of ipecacuanha, brought away from a farmer's daughter ſuch an aſtoniſhing quantity of bilious matter, that the dyſentery was entirely ſubdued at once. With moſt perſons the emetic got away pretty much of this matter; the excretion of blood was commonly for a time either ſtopped, or at leaſt leſſened, the tormina were immediately more eaſy, and the ſtools leſs frequent, though this alleviation remained but a few hours. The patients were in a very bad condition indeed, when this ſhort relief did not follow at all; otherwiſe this uſual conſequence of the vomit was a good preſage.

I likewiſe always gave an emetic with good ſucceſs, when I was not ſent for till a week, a

fortnight, or more had paſſed from the beginning of the diſeaſe, in caſe I ſuſpected a corrupt matter in the ſtomach, and there was neither inflammation nor ſuppuration in the bowels. More than one I never gave; perhaps I did wrong; but even this one was very ill taken of me. Sometimes, compelled to it by contrary indications, I began the cure without the emetic, and purged ſo much the more violently for it with good ſucceſs. To children that were extremely young, I very wrongly gave no emetic.

After having given the vomit in the morning, I ordered them to ſet out in the afternoon with the following drink: Take two ounces of barley, and boil them up with an ounce of cream of tartar, in two pints and a half of water, till the barley burſts; then ſtrain it through a linen cloth, and ſet the liquor by, which will amount to about a quart, to be drank warm at proper intervals, during the firſt afternoon, and the whole ſucceeding night throughout. I leſſened the doſe of the cream of tartar according to the age of the patient, though I moſtly ſtuck to the proportion before-mentioned.

On the ſecond day in the morning, I gave to adults three ounces of tamarinds, boiled up for the

the ſpace of two minutes, with half a pint of warm water, and ſtrained off; to children two ounces, and to very ſmall infants one. This gently opening medicine directly brought on the ſtools, more copiouſly than before, but after this their number was generally diminiſhed; ſometimes the tormina went quite away, but for the moſt part, were at leaſt greatly alleviated. A large copious excretion produced by this medicine, had always an excellent effect. Inſtead of tamarinds, I ſometimes gave Sedliz ſalts to the quantity of an ounce, or an ounce and an half, with the like ſucceſs. During the night, I repeated the barley-water with the cream of tartar. On the third day, I gave ſtill the tamarind decoction, if the malady was not ſufficiently diminiſhed; otherwiſe I put it off till the fourth day, and ordered nothing further in the mean time, than the barley-water with cream of tartar.

I gave the peaſants pretty often after the emetic, on the afternoon of the firſt day, a drachm of cream of tartar, with the like quantity of rhubarb: the ſame doſe on the morning and evening of the ſecond day, and the morning of the third. Sometimes I divided this into ſix doſes, and ordered the whole ſix to be taken by the fourth day, while, at the ſame time, I preſcribed the barley-water in the ſame manner; I dimi-

niſhed the doſes likewiſe in proportion to the patient's age. The ſucceſs was not bad; for by means of a vomit given at the beginning, two drachms of powdered rhubarb, with the like quantity of cream of tartar, and the common barley-water, with an ounce of the ſame ſalt; I have done many people great ſervice in three days time, and have in this manner even perfectly cured a woman fourſcore years old, of the dyſentery. By this method, however, the pains did not ſo ſoon remit; but on the contrary, grew much more violent; which did not happen when I omitted the rhubarb.

The cream of tartar and tamarinds did not only occaſion no pain, but very much diminiſhed it, when they proved ſufficiently purgative. They had alſo this advantage over rhubarb, that by means of their acidity, they acted very powerfully againſt the putrid fever; while on the contrary, rhubarb, except a deterſive and (as it appears to me) not very antiſeptic power, can boaſt of nothing more, than of being capable of contracting the fibres.

In obſtinate and tedious caſes, by means of an opening medicine conſiſting of three ounces of tamarinds, the ſtools became leſs frequent in the very height of the diſorder, and the patients

were

were always relieved. So far from being weakened by this purge, I perceived that they grew ſtronger and more alert than they had been before, when their bowels were diſtended with putrid matter.

In general, the tamarinds had a much quicker and better effect than rhubarb alone. So far from cauſing pain, they alleviated it very much, and accompanied with the cream of tartar during the intervals, finiſhed the diſeaſe in three or four days, even when the attack was very violent. Notwithſtanding the emetic, the ſtools grew very copious and of a bad appearance ſome hours afterwards, the pains great, and the wearineſs of the members very conſiderable. But very often all theſe ſymptoms ſuddenly vaniſhed on purging the patient with tamarinds.

As faſt as each ſymptom of the dyſentery decreaſed, and at length vaniſhed, I perceived that the fever in like manner decreaſed and vaniſhed. It took a faſt hold, and even grew very conſiderable, when the putrid matter was not evacuated in ſufficient quantities directly at the beginning. I made uſe of no other remedy for it, than thoſe which I have already indicated. They were ſufficiently capable of correcting and evacuating the bilious matter, and thus likewiſe of putting an end to the fever.

After the emetic I ſometimes too gave cream of tartar, rhubarb, and tamarinds by turns, with good ſucceſs. But I was guilty of an error in not being content with tamarinds, and the other medicines alone, when I had omitted the rhubarb.

A woman of fifty-ſix years of age, at Brugg, went to bed in good health, and was ſuddenly taken in the middle of the night with a very violent cold fit, accompanied with ſome whitiſh-yellow ſtools and cholicky pains. She had beſides a ſtrong propenſity to vomit, a taſte of bitterneſs in her mouth, and a perfect bilious vomit. She called me in the morning: I found her ſtill in the condition I have deſcribed, excepting that the cold paroxyſm was changed into a hot one, attended with ſleepineſs and wanderings. I gave her half a drachm of ipecacuanha, which ſhe took in the afternoon, while the cold fit was ſtill abſolutely on her; this vomited her violently with much relief, and the cold fit kept off. In the evening ſhe had much heat, doſing, and wanderings; as to the reſt, the ſtools were leſs frequent, and the cholic very tolerable. The whole night through I gave no medicine, and ſhe had twenty painful ſtools, which were of the colour of ſaffron.

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The second day I gave her, at eight and eleven in the forenoon, half a drachm of rhubarb, and an ounce of cream of tartar, in a quart of barley-water, which I ordered to be drunk out the same day. In the evening, I found the heat and fever much less than the preceding day; though the cold fit still came on at times, the stools were pretty frequent, and painful just before evacuation, of a saffron-yellow colour, and then for the first time bloody. All the night long they still continued in great number, being likewise attended with very violent pains, and blood.

The third day, in the morning, I gave her a purge of three ounces of tamarinds. In the evening, I found that this medicine had procured eight or ten large stools, on which ensued the greatest alleviation with regard to the pains: the fever seemed to me extremely mild. I now prescribed for this evening and night, nothing else than warm panada without wine: she had during this night too not the least pain, and only one stool.

The fourth day in the morning, I found a thick rash on her lips, and apthæ in her mouth. I gave her for this day two half drachms of rhubarb, and repeated the ounce of cream of tartar to be boiled in the barley-water, and taken in the

the uſual manner. Theſe remedies continued to evacuate a good deal of the peccant matter, which was all along ſomewhat bloody, but without the leaſt pain: the pulſe however appeared ſtill to be a little feveriſh. During the night, the patient had three ſlight and ſomewhat bloody ſtools; all the reſt of the time ſhe reſted perfectly well.

On the fifth day, I preſcribed nothing but linſeed-tea. Her ſtools entirely ceaſed, as well as her pains; notwithſtanding which ſhe did not ſleep the next night, which I took for a ſign of the preſence of yet more matter, and gave her therefore on the ſixth day, three ounces more of tamarinds in the uſual manner. Thoſe tamarinds evacuated at once an aſtoniſhing quantity of matter. From this time forward ſhe had no more pains, ſlept all night perfectly well, had a natural ſtool the following day, and was in perfect health.

I have often ſeen that tamarinds were of ſervice, when rhubarb was not. In order to prove this, I will at preſent relate only one caſe out of many others.

A farmer's ſon, in the diſtrict of Wildenſtein, had the dyſentery in the higheſt degree; on the fourth day I was conſulted. I gave him a vomit

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to be taken immediately, half an ounce of cream of tartar for the uſual barley-drink, and for the fifth, ſixth, and ſeventh day, three drachms of rhubarb in powder, to be taken in ſix times.

The eighth day his friends gave me an account, that no more blood came away from the patient, but the ſtools were yet very frequent, and attended with intolerable pains: that the patient beſides with each ſtool, felt a violent ſenſation of heat in the abdomen, and that his urine too ſcalded him in a very uncommon manner, as it paſſed off. I gave him three ounces of tamarinds to be taken at once, and an ounce of cream of tartar for the barley-drink.

The tenth day they brought me word, that the heat in the abdomen aud urine had ſuddenly diſappeared on taking the tamarinds, that the pain which remained was very tolerable, and the ſtools few. I gave once more the three ounces of tamarinds, and ounce of cream of tartar, both to be taken as before. This had likewiſe ſo good an effect, that the patient got perfectly well in a few days.

The tamarinds had in like manner a good effect, when I was obliged, for particular reaſons, to leave the emetic entirely out.

A blind

A blind man of two and ſixty years, in the diſtrict of Koenigsfeld, who had been long tormented with the arthritis, was taken with the dyſentery and putrid fever in the uſual manner; he ſent for me the ſecond day. I found it impracticable to give him a vomit, as he had two ruptures. I preſcribed therefore three ounces of tamarinds, diſſolved in water, which he was to take directly, and an ounce of cream of tartar, for a quart of barley-water, that I made him drink out during the night.

On the morning of the third day I was told, that my patient had taken all the medicines I had preſcribed, had had an uncommonly copious and frequent evacuation during the whole night, that the pain was very much decreaſed, and had grown more and more eaſy at each ſtool. I preſcribed again the three ounces of tamarinds, and for the night an ounce of the acid ſalt. On this all the pains vaniſhed, my patient had the whole night through but two ſtools; as to the reſt he ſlept well, and his ſtools were not longer bloody nor green.

The fifth day, I ordered my patient for the next four and twenty hours, nothing elſe than linſeed-tea ſweetened with ſugar-candy; that I might be able to obſerve, according to my cuſtom, the diſeaſe,

diſeaſe, when left to itſelf, and queſtion nature on the ſucceſs of my cure. I was told on the ſixth day, that during that time he had ſtill had ſome pain, and a few looſe ſtools. I preſcribed three ounces of tincture of rhubarb prepared with water, (as he was tired of the tamarinds) and ordered him to take a ſpoonful of it morning and evening. By the uſe of this, he not only got perfectly well with regard to the dyſentery, but alſo told me ſome weeks afterwards, that he found himſelf better than ever with regard to his arthritic complaint, that he ſeemed to have loſt his pains in his knotty joints, and could walk out whenever he pleaſed.

The tamarinds were alſo of ſervice when taken alone. A child of four years of age, in the diſtrict of Caſtel, had laboured under the dyſentery and putrid fever five days before I was called to it. I gave it ſix ounces of tamarinds, of which it was to take two ounces diſſolved in water, every morning, for three days together. By the uſe of this it was re-eſtabliſhed immediately, without any other help.

Acids were of great uſe. A very ſtout man in Brugg, had all day long a violent ſhivering, and a conſtant fruitleſs endeavour to vomit. In the evening he was ſeized with a violent belly-

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ach, which lasted almost without interruption all the night following, and was accompanied with frequent and copious stools. The second day he called me in. I gave him half a drachm of ipecacuanha, which vomited him twice with great relief; the pain though very violent, returned but seldom throughout the whole day, and he had about twenty stools. In the evening, I gave him half an ounce of cream of tartar, to be taken directly, and continued the whole night throughout, with a quart of barley-water. He drank this out, and his pain and stools disappeared entirely by the morning. The third day I gave him three ounces of tamarinds, that brought on three gentle stools: on the fourth, he was well. But in a much more considerable case of the dysentery, I have perfectly cured a person sixty-eight years old in four days, by the use of three ounces of tamarinds, and half an ounce of cream of tartar every day.

I could not however always bring the affair to pass, purely with evacuating and antiseptic remedies. The pains were at times extremely violent, when the patients had not been purged enough at first, and in the course of the disease were too averse to taking the opening medicines; accordingly the bearing down was in these cases intolerable. I was also sometimes obliged to

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think of medicines more immediately anodyne, and where my hands were bound in various ways, to leſſen the too great violence of the purging by innocent means.

I always looked upon it as dangerous to give opium in the dyſentery, before the fuel, that fed the fire of the diſorder, was burnt out. I endeavoured therefore to find out a method of giving opium, in theſe obſtinate and extraordinary painful caſes, with as little prejudice as poſſible. This happened for the moſt part to be of benefit, but was not always without prejudice.

The laudanum liquidum Sydenhami, given to ſix drops in linſeed-tea every ſix hours, to a pale young gentleman about nine years old, who for ſome years had been plagued with worms, ſoothed, indeed, his violent pains on the eighth day of the diſerder, after a hearty evacuation, but it very much increaſed his fever; though at the ſame time I ordered him every three hours day and night, a large ſpoonful of tincture of rhubarb prepared with water. It cauſed likewiſe, in this child, an endeavour to vomit, as it retained the putrid matter ſtill remaining behind, and indeed brought on a downright vomiting. But all theſe indiſpotions vaniſhed on the repeated uſe of the tamarinds,

rinds, cream of tartar, powder of rhubarb, and on totally laying aside the laudanum.

Sixteen drops of the laudanum Sydenhami, given to a young man of Brugg, after copious evacuations made on occasion of his being afflicted with violent pains in the bowels, excited anxious dreams, and a pretty smart pain in the joints, while that in the belly ceased entirely; however, this pain in the limbs vanished the next day. Eight drops in the evening, and the same quantity at midnight, were on the contrary afterwards of good effect in the very same person; he had no pains in the joints, nor in the belly, no dreams, less sleep, and seven stools during the whole night, instead of an hundred and fifty or two hundred, which he had had before every night. Yet the distemper grew long and tedious, and continued on him a fortnight; this I ascribed to the laudanum, which to be sure eased the patient, but by the very ease it gave, lengthened the disorder. This is the only one among all my patients, who had the prolapsus recti at the end of the disease; but he soon recovered, and remained from that time perfectly fresh and healthy.

In four other cases I have observed, that the laudanum Sydenhami given after proper evacuations,

ations, alleviated the pains, and leſſened the number of ſtools, without ſtopping them entirely; I began then immediately with the rhubarb. Whence appears, that it ſometimes had the advantage of ſomewhat diminiſhing the ſtools, without putting a ſtop to them, and in the mean time of taking away the pains: but without rhubarb given in the intervals, or juſt after, it was very plainly pernicious.

In the child of a perſon of condition, a year old, notwithſtanding all its crying and purging, the dyſentery was not diſcovered till the fourth day, and then only from the circumſtance of the pure blood being ſeen run in ſtreams down its thighs. After the moſt violent pains, this child fell into a continued lethargy, with perpetual ſpaſmodic contractions in all parts of the body: I expected nothing elſe to follow, but death. In the mean while I gave him a purge of tamarinds, every three hours the whole day and night throughout, two large tea-ſpoonfuls of the tincture of rhubarb made with water, a great deal of linſeed-tea, and every ſix hours, three drops of Sydenham's laudanum. Its excrements were very copious, and of various colours, white, yellow, brown, green, red, and black. By this method the child, in ſpite of a miliary eruption, (which appeared

towards the end of the diſorder, and went off ſpontaneouſly by deſquamation) got well in a fortnight.

To a child of two years of age, in Brugg, that upon the firſt onſet of the diſorder, entirely loſt all ſenſation from a ſpaſmodic contraction of the nerves, I gave the tamarinds and the tincture of rhubarb, but no laudanum; accordingly it died. The death of this child is the only one, which I could aſcribe to my want of capacity and knowledge in my profeſſion; the few other deaths that happened, were entirely owing to the untowardneſs of my patients.

I found chamomile-tea the beſt means next to opium, of alleviating the pains, and beſides that, it is at the ſame time antiſeptic. I gave this infuſion, which is even of ſervice in inflammations of the bowels, in great plenty, and very often with good ſucceſs. Linſeed-tea, rice-gruel, barley-water, and clyſters of gum arabic, were alſo very ſerviceable in mitigating extraordinary violent tormina; though the clyſters came away often without effect, and therefore I could place but very little confidence in them at the height of the diſorder. I likewiſe gave an almond-emulſion to be drunk quite warm, which the patient found very ſerviceable, whenever the pains were conſiderable.

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In general I perceived very well, that the pain could not be radically cured by any means, unleſs the ſole cauſe of the diſtemper, the putrid matter, were diſcharged. In like manner the violent teneſmus, which was ſo very troubleſome even at the end of the diſorder, was not put a ſtop to either by Diaſcordium clyſters, or the Theriaca and milk, as Huxham adviſes; for the evacuations muſt be repeated, as long as the teneſmus continues. In many of my patients, I found at the end of a very violent illneſs, a painful irritation to ſtool, which for the moſt part was fruitleſs, and which was followed very ſeldom by a very ſmall ſtool. I accounted for this, from the loſs of the natural mucus in the rectum. But this explication was falſe; for I gave them in conſequence of it, clyſters of half an ounce of gum arabic diſſolved in warm water, and they were of no ſervice; I gave laudanum, and it was juſt the ſame; I then gave them morning and evening, a ſpoonful of the tincture of rhubarb above-mentioned; and this was of the greateſt benefit. Whence I learned, that this teneſmus, which appeared towards the end of the diſeaſe, did not proceed from the too great denudation of the inteſtines, and an increaſe of their ſenſibility proceeding therefrom; but in reality from a ſubſtance, that ſtill remained in the cavities of the great guts.

Many of my patients called me in late, and ſometimes extremely ſo. In theſe caſes, where Simaruba, Caſcarilla, and the Terra Iaponica are uſually thought to be abſolutely neceſſary, I gave ſometimes an emetic, and with rhubarb alone finiſhed the whole affair, when the diſorder had laſted very long. A woman of ſixty-three years of age, in the diſtrict of Wildenſtein, that had had the dyſentery a week, and had at that time fifty ſtools in twelve hours, at the ſame time that every thing ſhe eat and drank came away from her by vomiting, I cured with an emetic, and the other remedies above-mentioned, in a few days. I have made ſome people well in the country, that had been a month together without medicines, and were attacked with a long tedious dyſentery, attended with a great ſenſe of wearineſs in the members, ſhiverings, violent ſweats, and a perfect indigeſtion. All that I gave them, conſiſted merely in a few doſes of rhubarb in powder, to the quantity of half a drachm, which I ordered them to take in the morning for two days together, with chamomile-tea. With this powder they were tolerably well purged and with great benefit, getting well in a couple of days; on the contrary, theſe caſes were dreadfully prolonged, when in contempt of phyſic and phyſicians, the diſorder was left to nature, quacks, and old women. A woman in the

diſtrict

diſtrict of Caſtel, had had the dyſentery already ten days in a very high degree, when ſhe conſulted me. I gave her only for a couple of days, ſome cream of tartar to be diſſolved in barley-water, the rhubarb powder, and chamomile flowers for tea, in expectation that ſhe would ſend me an account of the manner in which ſhe found herſelf, and aſk for more medicines. She ſet thoſe ſhe had aſide, as they were not of ſervice the very firſt day, and let me hear no more of her. She continued thus with the dyſentery on her for the ſpace of nineteen weeks, following a thouſand old womens recepts, and at the end of that time I learned by chance from her huſband, that ſhe had not yet got rid of her complaint, and ſtill had blood in every ſtool.

To ſuch, as without keeping their beds, had only a violent belly-ach, and at the ſame time were coſtive, I gave for ſome days together a drachm of powder of rhubarb, to take at twice. The excrements were likewiſe in thoſe perſons, immediately after the firſt evacuation, bloody, and white, as if they were purulent. But after ſome ſtools they found relief, the tormina vaniſhed, and they were well in a few days.

Almoſt all the ſick, that were cured by me to a conſiderable number, ſhewed an extraordinary

appetite while under cure. For which reaſon, I did not think any medicines to ſtrengthen the ſtomach and bowels here neceſſary. Eating ſtrengthened them enough: to ſome I gave, by way of corroborating the ſtomach, a ſpoonful of tincture of rhubarb every morning; to others, Hoffman's viſceral elixir. But I never gave corroborating medicines merely with a view of hindering a relapſe; for I do not think, that even our egregious Mr. Conrad Rahn *, can prevent the dyſentery by means of ſtomachics.

In general, at the beginning of the diſtemper, ipecacuanha, cream of tartar given in great quantities with barley-water, and tamarinds, were my principal remedies. Againſt the tormina, I made uſe of chamomile and linſeed-tea, almond-emulſions, gum arabic clyſters, and, but ſeldom, and that with the greateſt caution, of laudanum. Towards the end of the diſeaſe, rhubarb was of ſingular ſervice.

* The reader will be pleaſed to obſerve, that what is ſaid here and in the following pages, of this gentleman, is by no means to be taken in a ſerious light.

CHAP. V.

The Effects of other REMEDIES.

WE muſt try many things, obſerve and compare every thing; if we would not be mere novices in the knowledge of nature, and would wiſh ſometimes to draw conſequences from our obſervations, that may be of univerſal uſe, and extenſive in their effects.

We grow ſometimes rather negligent from ſome ſucceſsful events, and do not examine, when the ſick are cured, whether we could not have ſaved them by a ſhorter, better, ſurer, and more univerſally uſeful method. This ſelf-applauſe in a phyſician, is a moſt invincible obſtacle to his progreſs in the profeſſion; for when one meets with approbation, one ſhould always conſider, whence it comes. I honeſtly confeſs, I did not treat the firſt patients I had in this year's dyſentery, with as great depth and ſolidity of judgment, as thoſe that came after; though not one of my firſt patients died: notwithſtanding which my method was faulty.

In the fifteen years that I have practiſed phyſic, I never ſaw the dyſentery ſo frequent as this

year. Notwithſtanding which, I have during this long ſpace of time, viſited a tolerable number of dyſenteries, and followed a method with them, that was ſo far not unfortunate, as none of my patients died; and of which I will give the two following examples.

A woman of ſixty-one years of age, worn out with frequent hyſteric fits, and who had been before this very often attacked with many violent diſtempers, was ſeized in the year 1759, with a terrible dyſentery; ſhe ordered me directly to be called. I preſcribed her the tincture of rhubarb prepared with water, a large ſpoonful to be taken every three hours day and night, and in the intervals I made her drink plentifully of an almond-emulſion, in which gum arabic was diſſolved: I likewiſe ordered them often to give her clyſters of gum arabic and barley-water. By degrees her intolerable griping pains, her very high fever, and her teneſmus diſappeared, on the uſe of theſe remedies: her ſtools too decreaſed very much. At the approach of the fourth night, I thought I might venture to give ſixteen drops of the laudanum Sydenhami: this night ſhe was very quiet. The fifth day the patient was eaſy, without pain, ſtools, bearing down, or fever, and quite chearful and hearty. I now gave her no more medicine,

dicine, in order to see, whether the laudanum did not deceive me. But likewise in the afternoon all the bad symptoms kept off, excepting that she was a little delirious. I gave her nevertheless the almond emulsion with the gum arabic in the evening, and things remained as they were before; in a few days, by means of some strengthening medicines, she was perfectly recovered. Two years after she had the dysentery again, and that very violently; in a week I set her up again, with the very same remedies.

A very stout, healthy, fresh, lively lad, about twenty years old, brought with him in the year 1763, the dysentery from Zurzach, where it then was epidemic. It was very violent, and attended with all kinds of bad symptoms: the sick person's father, a country parson, and a sage of the Paracelsian school, gave him infallible remedies against the dysentery one after another, while in the mean time the distemper rose higher and higher. I, a simple layman, was called on the eighth day of the disease, and found the lad quite spent and overcome, with a down-cast, shrivelled, and perfectly corpse-like countenance, though before he was very handsome in the face. His voice was slow, weak, and broken; the cold sweat ran from him on all sides, and bloody gangrenous stools came away with violent

pains

pains every minute. I told the unhappy father to throw all his infallible remedies out of the window; and gave the ſon, on the eighth, ninth, and tenth day of his diſorder, which was now in reality riſen to a very high degree, not fiery cordials, and infallible remedies that would have killed him, but only ſtrong doſes of the tincture of rhubarb in water, almond-emulſions, (which at firſt he brought up again) barley-water, and gum arabic clyſters. By this moſt unchemical, and in the higheſt degree, ſimple method, the youth that before lay at death's door, obtained in a few days his former health, and ſoon after his full ſtrength, his uſual chearfulneſs, and his fine lively colour.

Theſe examples, ſelected from many others, induced me to try alſo the ſame method, or one very little different from it, in this year's dyſentery. I will at preſent cite two examples of its ſucceſs.

A woman at Brugg, thirty-ſeven years of age, of a very irritable temperament, and ſubject to the moſt violent hypochondriacal and hyſteric ſymptoms, was ſeized this year in June with the dyſentery. She ſent for me on the third day, and and told me, that ſhe had hitherto had only twenty ſtools in twenty-four hours, but that theſe were accom-

accompanied with very violent pains, and that with each ſtool ſhe had a propenſity to vomit. I gave her three drachms of rhubarb in powder, divided into ſix parts, and ordered her to take one of them every two hours, with chamomile-tea, between whiles water juſt boiled up with rice, and almond-emulſion. The fourth day I found my patient had leſs pain, her ſtools were as copious as before, and ſtill tinged with blood. I gave her again ſix half drachms of rhubarb, to be taken in the ſame manner as the firſt. In the evening ſhe was ſomething better, ſhe had had in the mean while ſeven ſtools more: I ordered her at night nothing but the rice-water. The fifth day the ſick woman told me, ſhe had had in the night eight very painful ſtools, and an intolerable teneſmus. I preſcribed her a ſpoonful of tincture of rhubarb every three hours, half an ounce of gum arabic diſſolved in half a pint of water, to be taken by way of a clyſter directly, and a ſecond clyſter of the ſame kind in the evening. Upon theſe medicines her pain almoſt entirely ceaſed, and ſhe had the whole day long but two ſtools, and thoſe without blood. During the night I made her drink almond-emulſion, and the rice-decoction. The ſixth day ſhe found herſelf very well; however, I let her ſtill go on with the tincture of rhubarb, and the ſame diet. She recovered her health,

but

but nevertheleſs had two relapſes; the firſt from being put into a paſſion by a quarrel, the ſecond from being twice wetted through at night with the rain. She was cured by the ſame means as before.

A ſickly, heavy, lethargic perſon, of nine and twenty years, inclining to green ſickneſs and white ſwellings, was attacked very violently at Brugg this year in Auguſt, with the dyſentery. Being applied to for advice the ſame evening, I gave her an ounce of tincture of rhubarb prepared with water. She had the whole night throughout very violent pains, a great many ſtools, and a conſtant propenſity to vomit. I gave her the ſecond day half a drachm of ipecacuanha, and let her afterwards go on with the tincture of rhubarb as before; as to the reſt, I allowed her to eat or drink nothing but rice-gruel, water-gruel, and chamomile-tea. In the evening ſhe told me, that a vaſt quantity of mucus and bile was come away with the vomit, that her tormina were violent, and her ſtools not very copious: as to fever, I did not find that ſhe had any, and gave her an ounce of tincture of rhubarb to be taken as before. In the night her ſtools were more frequent, and her pains almoſt intolerable. She was in the ſame ſtate on the morning of the fifth day, when I ordered

ordered her an ounce of the tincture of rhubarb, and two half ounces of gum arabic for as many clysters. But these clysters came away immediately each time, my patient was all day long obliged to go to stool every minute, with ineffable torments, and there came away an immeasurable quantity of water, mucus, bile, and blood. I bid her take an ounce of rhubarb as before, and drink almond-emulsion plentifully, with rice-gruel. Notwithstanding which, she had just in the same manner a large stool every minute, with cholicky pains. Her nurse could not bear any longer the smell of her stools, though she aired the chamber continually, and carried them out immediately, as fast as they came away.

The fourth day in the morning, all these complaints were at a very great height. I prescribed, together with the usual drink of almond-emulsion and rice-gruel, two spoonfuls of a mixture composed of an ounce of tincture of rhubarb, half an ounce of gum arabic, and seven ounces of water, to be taken every hour. In the evening I found my patient sitting almost continually on the close-stool, her excrements inexpressibly copious, enough to stink one to death, yellow, green, brown, black, and streaked with a quantity of blood; she at the same

ſame time full of pain, anxiety, and terrors almoſt to deſperation, extremely weak, and at times even fainting away. I let her take all at once half of the mixture ordered in the morning, and which ſhe had not till then made uſe of. I then gave her for ten o'clock at night, twenty drops of the laudanum Sydenhami, and ordered that ſhe ſhould drink as much almond-emulſion as poſſible all night long. Her dead pale cheeks were affected with a great heat, as ſoon as ſhe had taken the laudanum; ſhe ſlept ſome hours afterwards, had a few ſtools, and very little pain. On the fifth day in the morning, I made her take the other half of the mixture, with the almond-emulſion and chamomile-tea. In the afternoon I ſtill found her with the fluſhing in her face, a fly undermining fever, and but few ſtools in the ſpace of an hour, which were no longer of that cadaverous quality as before, nor bloody, but attended with great pains. I ordered that a clyſter ſhould be given her of gum arabic and water, which came away directly without effect. In the evening her pains were very violent, at night I gave her ſixteen drops of Sydenham's laudanum, and preſcribed a good quantity of almond-emulſion. She ſlept ſome hours, had five ſtools in the night without pain, and in the morning found herſelf better in all reſpects.

The

The ſixth day, I ordered nothing elſe in the morning than the ſame clyſter, rice-decoction, and almond-emulſion; ſhe had three ſtools, and her excrements were again ſomewhat red. In the afternoon I found my patient without fever, heat and pain: I preſcribed again a clyſter of gum arabic, and the ſame drink. Notwithſtanding which the pain returned, her ſtools continued, and were green, black, and ſomewhat tinged with blood, but much leſs ſtinking than before; ſhe herſelf was quite free from any fever, but feeble, and inflated: I gave her ſixteen drops of laudanum. This medicine had the uſual effect in the night, when ſhe had three ſtools in the ſame manner as before. The ſeventh day I gave her early in the morning an ounce of tincture of rhubarb, of which ſhe was to take a ſpoonful every two hours, and as to the reſt, to go on with the ſame diet-drink as before. The conſequence was, that the patient had that day nine perfectly yellow, ineffably ſtinking, but in no wiſe painful ſtools, which gave her the greateſt eaſe. At night I gave her ſixteen drops of laudanum; ſhe had two ſtools, almoſt without ſmell. The eighth day I gave no medicines, to ſee how far the diſorder had really gone: ſhe had a few, bilious, painful ſtools, that began already to ſmell ſtrong. I preſcribed for the night, laudanum, and for the

following day, every three hours a ſpoonful of tincture of rhubarb. The ninth day ſhe found herſelf perfectly eaſy, was hearty, and contrary to her uſual cuſtom, in good humour: her ſtools were very few in number, but ſtill continued bilious; I made her go on with the tincture of rhubarb, and adviſed her now to eat ſomething more ſolid. In the night ſhe had ſome pain, and on the tenth day five ſtools, otherwiſe ſhe was very well. It was the ſame on the eleventh, when I preſcribed her only a ſpoonful of the tincture of rhubarb morning and evening; ſhe ſlept the whole following night, and her looſeneſs had entirely ceaſed. Things were in the ſame ſtate on the twelfth day, notwithſtanding which I adviſed her to take the tincture of rhubarb twice a day. On the fifteenth day ſhe was ſo well recovered, as to complain of nothing but ſome remaining weakneſs; I gave her an ounce of the elixir of vitriol, to take forty drops in water twice a day, with which ſhe got perfectly well.

A perſon that has any knowledge in phyſic, will eaſily perceive the faultineſs of this method, with reſpect to the dyſentery of 1765. Many phyſicians think themſelves very bold, when they venture to give the tincture of rhubarb in a few drops to adults; which, to me, has the look of a man's attempting

ing to make a breach in a battery, with the ſame ſhot as he uſes to kill ſparrows with. Degner gave in the dyſentery at Nimeguen but half a ſpoonful, or a ſpoonful, every four or ſix hours. My doſes were larger and more numerous; notwithſtanding which, the effects of the rhubarb were too ſlow and tedious, as it was neither purgative nor antiſeptic enough, and let the diſorder get to a great height. In ſome very ſevere caſes of the dyſentery, which on account of the prolixity I have been guilty of in other places, I have not here related, I gave at firſt an emetic, and afterwards till the fifth day tincture of rhubarb in great quantities, with almond-emulſions, and rice-water, without any good effect: on the other hand, cream of tartar produced a ſudden alteration for the better, by rendering the ſtools more copious, and of a more ſolid conſiſtence. Hence I concluded, that this method was in general of no ſervice in this epidemy; that I might for the moſt part reſerve the tincture of rhubarb for ſlight indiſpoſitions, (in which indeed I commonly found it of benefit) but that it was an excellent remedy towards the end of the diſorder.

In like manner, the rhubarb in powder did not purge ſufficiently in the beginning. It always increaſed the pain, (which however did

not happen on taking it in tincture,) and the number of ſtools was not very much leſſened. Mixed with cream of tartar it purged better, though ſtill with much pain; on the contrary, the tamarinds evacuated quickly, copiouſly, and without bringing on freſh pain; and directly after their operation, the number of ſtools was ſuddenly diminiſhed. Thoſe perſons to whom I gave an emetic in the morning, and afterwards that evening together with the ſubſequent morning and evening half a drachm of rhubarb, always recovered ſlower than thoſe, to whom I preſcribed at the ſame time a great quantity of cream of tartar with barley-water. We may ſee from all this, that though many great phyſicians, and even Degner himſelf, look upon rhubarb as the choiceſt purge in nature in dyſenteric caſes, on account of its poſſeſſing at the ſame time a laxative and corroborating, or rather an aſtringent power, they did ſo without ſufficient grounds: that rhubarb in a dyſentery attended with a putrid fever, without the addition of acids, lets the diſorder go on its own train; and thus is the occaſion of its being prolonged, and is therefore by no means a ſpecific in this diſtemper.

Being of a rather incredulous diſpoſition, and acquainted with one particular only, a method that anſwered my views in every reſpect, I was not inclined

clined to try a heap of other remedies, otherwiſe very much prized in the dyſentery. On the other hand, two other phyſicians have communicated to me ſome very important experiments on the uſe of the vitrum ceratum antimonii, grapes, and other fruit, which I will here relate with the moſt unfeigned pleaſure, for their honour, and the benefit of my fellow-creatures.

A Lutheran clergyman, of great penetration and underſtanding, the Rev. Mr. John Merk, miniſter at Ravenſburg in Swabia, encouraged Dr. Moehrlin, a phyſician in this city of great ingenuity, and twenty-eight years practice, to make a trial of the vitrum ceratum antimonii. Eight days afterwards this phyſician told him with a ſmile, the meaning of which a man, who has any ſentiments of humanity, cannot be ignorant of, that he had tried the medicine on three perſons; but had occaſioned therewith ſo great indiſpoſitions, that he was in the greateſt haſte to have recourſe to every thing he could think of, capable of putting a ſtop to them, and had therefore no great inclination to try it any further. But as Mr. Merk ſaw very well, that this remedy could not have ill performed the intended effect, in regard to the diſorder itſelf; he begged the phyſician with the irreſiſtible argument of the benevolence due to his brethren, not yet to give up the

affair, the rather, as the concomitant effects could be eaſily remedied. Some weeks after, the doctor ſaw Mr. Merk again, and told him with the greateſt joy, that he had already ſaved ſome perſons by means of the vitrum ceratum, the acrimony of which was obtunded with marſh-mallows root, and in the ſpace of two days had very well recovered ſome, on whom the uſual remedies had proved ineffectual, who had been even delirious, and had one foot in the grave. He therefore continued this remedy, eſpecially where any thing malignant appeared, and that always with very good effect.

Upon this, Dr. Moehrlin was pleaſed to ſend me a circumſtantial account of theſe cures from Swabia. He made the firſt of the above-mentioned experiments, upon a woman of ſeventy years of age. He gave her ſix grains in luke-warm water in the morning faſting, and ordered her not to eat or drink any thing for the ſpace of three hours; after that he went again to ſee her, but found her quite weak and miſerable, and apprehended a fatal and ſudden end to the diſorder: however he encouraged her, and gave her with his own hands a good portion of fat mutton broth. In the ſpace of two hours ſhe had twenty ſtools, after that the excrements were without blood, the cholicky pains went off,

off, and ſhe reſted well two hours in the night. The following day her looſeneſs was ſtill more diminiſhed, and Dr. Moehrlin in the Hippocratic method, ſtood ſtill without doing any thing. The third day the woman thanked her phyſician for his excellent remedy, and told him, that ſhe had ſlept well the whole night through, and had ſcarce had three ſtools. Upon this the doctor ordered her nothing elſe than a good diet, and after ſome days found his patient perfectly ſet up again.

Hereupon Dr. Moehrlin continued the uſe of this remedy, and the rather, as at the end of Auguſt the number of the ſick daily increaſed, and rhubarb and ſimaruba were too dear for the lower ſort of people. The firſt doſe of ſix grains occaſioned ſickneſs and faintings with every body; the ſecond and third however did not; yet prejudiced people were much againſt the antimony, as the apothecary made them believe ill of it, becauſe in truth he gets very little by it. However Dr. Moehrlin took it into ſerious conſideration, whether he could not remedy theſe bad effects: this was not very difficult, for inſtead of making uſe of his Æſculapian authority to forbid all ſort of drink, he had nothing elſe to do, than to order directly at the beginning of the diſorder, a baſon full of barley-gruel, or the like

emollient drink. At length he took it into consideration, whether it would not succeed to mix three or four grains of marsh-mallows root powdered, with six grains of the antimony; nature now effected what the doctor desired, the sickness and faintings did not come on, the excretions were quicker, more copious, and without pain.

Dr. Moehrlin had given this remedy to above seventy persons of all ages: there were but few that required more than three doses, (each dose containing six or eight grains) in order to be cured: the first dose increased the flux, with the second it diminished, and with the third it disappeared. It was very seldom necessary to increase the quantity of the above-mentioned doses, or to add to the number of them. With one person, who did not follow the diet prescribed, Dr. Moehrlin proceeded as far as the ninth dose, the last of which consisted of fourteen grains; this in the space of four hours occasioned above thirty stools, and upon that the tormina, tenesmus, and even the singultus ceased entirely, sleep returned, and after some days the patient was perfectly well. Dr. Moehrlin found that bloodletting was one of the best preparatives towards the cure of this disorder, when he was called directly at the beginning; on the contrary, he found

found it of great diſſervice, when the malady had already ſpread itſelf through the whole body. In this caſe three doſes were not ſufficient, and even then at the end of the diſorder a dropſical tumor extended itſelf over the whole body, which continued for many weeks.

All theſe things being taken together, we muſt confeſs that this famous antimonial remedy, long ſince made known to us by the Edinburgh eſſays, ſhewed itſelf in Ravenſburg, to be one of the beſt and choiceſt remedies againſt the then epidemic dyſentery. I ſhall have occaſion in the tenth chapter, to take it more fully into conſideration.

A much more agreeable remedy, but which in conſequence of a generally received, though very ſilly notion, was looked upon as a real poiſon, was made trial of with the ſame good ſucceſs. Dr. Keller, an ingenious, careful, and extremely diſcreet young phyſician, at Weinfeld in Torgaw, had not only had an opportunity to vindicate the innocence of grapes and fruit, with reſpect to our dyſentery, but even to experience in the cleareſt manner, their prodigious uſe in the cure of this dyſentery.

He began with a child a year and a half old, which had been haraſſed with the dyſentery for the ſpace of eight days, in a miſerable manner. Whatſoever artifice was employed, it could not be brought to take the leaſt medicine, had already had ſeveral convulſions, and appeared to be very near its end. The parents in the greateſt diſtreſs, begged of Dr. Keller in the moſt urgent manner, to try every thing in the world to ſave their child. He adviſed them to give it grapes: the parents fears for its death, got the better of their prejudices, which might otherwiſe have occaſioned it; the child eat two grapes in the evening, and ſlept very ſound the whole night. The next day they gave it more grapes, and after having eaten a great many of them during the ſpace of eight days, it got perfectly well.

In the mean time Dr. Keller had under his care a gentleman of rank, and of great knowledge in medicine, who was attacked with the dyſentery: this perſon had taken the neceſſary evacuating medicines with good effect, but could not reſolve upon taking any other remedy. In theſe ſad circumſtances Dr. Keller adviſed him in the ſame manner the uſe of fruit, and three days afterwards received from him the following letter.

SIR,

SIR,

"AN averſion for all ſorts of medicine has brought me at laſt to a reſolution of trying the effects of fruit. In the forenoon I began with two grapes; at noon I indulged myſelf with ſome freſh plumbs boiled; after that I eat ſome more raw, at the ſame time three peaches, and towards evening a few black-berries. All this agreed very well till eight o'clock, when the tumult in my bowels began, and continued on in the ſame way till midnight, ſo that in all that time I could ſcarce ſtay half an hour in bed; though all this was without pain, teneſmus, or any other indiſpoſition. Without doubt two potions of manna, and four rhubarb powders, would not have had ſuch an effect upon any man in the world. On this followed my natural reſt; in the morning I found myſelf very well, and eat my haſty-pudding with pleaſure. This happy ſucceſs encouraged me to go on in the ſame manner the next day. The effect was exactly the ſame, though ſomewhat leſs ſudden. My appetite and ſleep increaſe, and every thing goes on better, thank God, from day to day."

This

This letter, which Dr. Keller inceſſantly read to all he met with ſick or well, prevailed at laſt ſo much, that every body had a mind to eat fruit; and that every one, that was not obſtinate to the higheſt degree of folly, did in reality eat it, and all with the beſt ſucceſs.

A phyſician of penetration, but by reaſon of the milkineſs of his diſpoſition ſomewhat timorous, and perhaps not free from all kinds of prejudice, has ſince ſaid in the preſence of the ſociety for natural enquiries in Zurich, That fruit, though he could not but allow it to be of real uſe in the dyſentery, might nevertheleſs do harm, on account of the quantity of air which it generates, according to Hales's and Macbride's experiments, by diſtending too much the fibres of the inteſtines, already violently irritated by the diſorder. Hereupon Mr. Chamberlain Heidegger of Zurich, a great ſtateſman, who with the moſt inconceivable penetration pierces into every thing worthy of being known under the ſun, replied, that this was really true; but the ſame experiments ſhewed, that the air generated was again abſorbed on the ceſſation of fermentation, by the juices of the fruit, and therefore this effect could not laſt long. It appears to me, that grapes and other fruit inflate bowels that are very weak, and otherwiſe ſubject to too great expanſion, when they do not prove

purgative, and the body is rather bound, or the teneſmus very great; juſt as manna is very inflating, when it does not purge ſufficiently; but by the purgative power of certain fruits, and principally grapes, the ſtools of moſt of my patients were promoted, and with them the wind moſtly came away. Conſequently it was juſt as little neceſſary to fear in this caſe, that the ſick would burſt aſunder like a bomb, from eating a few grapes, as it was for the great Winſlow to proſtrate himſelf before the altar of the virgin Mary (when he had preſcribed two ounces of manna in the hoſpital at Paris) under an apprehenſion that it might excite too ſtrong a purging, or tear in pieces the tender tiſſue of the fibres of the inteſtines.

It follows from the contents of this chapter, that in reality the tincture of rhubarb prepared with water ſometimes performs very good cures in the dyſentery; but that this tincture in general, was too feeble a remedy in our dyſentery; that the powder of rhubarb, without the addition of other remedies, let it go on its own train, and thus was the means of prolonging it, and that therefore rhubarb is no ſpecific in the dyſentery; that the vitrum ceratum antimonii, ſhewed itſelf to be one of the beſt and choiceſt remedies in this diſtemper; and that grapes and fruit

fruit likewiſe evidently appeared to be an excellent remedy for the ſame, though in the Hippocratic aſſemblies of old women, it ſtill meets with a very bad reception.

CHAP. VI.

Effects of Aſtringent and Conſtipating Medicines, of Aromatics, Brandy, and Wine.

THE old phyſicians ſo far agreed with one another in the cure of the dyſentery, that inſtead of ſtriving to evacuate the matter, they choſe unanimouſly rather to reſtrain it, and put a ſtop to its efflux, with incraſſating and aſtringent remedies; by theſe indications the diet and the whole method of cure was regulated.

Such notions, as are the produce of ignorance and folly, are never to be eradicated. It is true, the phyſicians of our times, oppoſe for the moſt part that method, which is calculated to cure the bilious dyſentery, by the means of conſtipating and aſtringent medicines; but mankind are too apt to reject in ſpeculation, what they make uſe of in practice. Aſtringent remedies are as yet by no means baniſhed, and are preſcribed by ninety phyſicians out of an hundred; it is true, they begin with a few evacuating

ating remedies; but of what uſe is it, to give the firſt day an emetic, the ſecond rhubarb, and afterwards nothing elſe but conſtipating and aſtringent medicines. I found myſelf forced twice in our dyſentery of 1765, to preſcribe a purge even at the ninth and eleventh day of the diſorder; as my patients were then in the greateſt danger, their fever very violent, their ſtools innumerable, and their weakneſs uncommon. This purge conſiſted of tamarinds; after the evacuation, which followed it, the ſtools were very much diminiſhed in quantity, the patients heartier than before, and the diſorder was at an end in a few days. Suppoſe now that I had done in theſe caſes, what moſt phyſicians generally do, that is, after the evacuations of the firſt day, gone on with reſtringents: without doubt the conſequence would have been a tedious fit of ſickneſs, or death.

My hair ſtood an end, when the Proviſion (as it was called) againſt the dyſentery, made by the excellent college of phyſicians of Bern in 1727, and diſtributed among the country people, lately fell into my hands. At the very beginning of it, the phyſicians of Bern make this remarkable obſervation, that the then epidemical dyſentery did not perhaps only proceed from a diſordered ſtomach, but ſhould be conſidered in the light of an acute fever, which produced

an

an inflammation of the bowels. We may hence conclude, that that ſpecies of the dyſentery, which is accompanied with an inflammatory fever, was at that time epidemic there; and yet the phyſicians of Bern in their Proviſion, preſcribed almoſt nothing elſe than extremely conſtipating and aſtringent medicines; conſequently every thing in nature, that had the greateſt power of increaſing the inflammation.

The Proviſion (as it is called) againſt the dyſentery, iſſued out by the very ſame college in the year 1750, which was printed and diſtributed through the whole land, is, it muſt be owned, ſomething changed; however, excepting a very large doſe of ipecacuanha, and a couple of doſes of rhubarb, the other medicines are as conſtipating and aſtringent as poſſible. Without doubt this method was at that time good in many caſes: but I hope to be excuſed for not giving credit to this Proviſion, in the epidemy of 1765, although it was dealt out by I know not what miſtake this year, in ſeveral places up and down the country. Some practitioners gave credit to it, and followed it ſo well, that their patients could certainly not have recovered in leſs than a quarter of a year. But I fear on this account, that the light of this century does not ſhine upon theſe gentlemen, who

who have perhaps never read any other medical work in their lives, than this ſame Proviſion.

The ſpirit of contradiction is not my failing; as much a martyr to the truth as I otherwiſe am in this my beloved country. In the mean while it is and ever will be certain, and very eaſy to demonſtrate, that aſtringents (or opiates given before the proper time) in the dyſentery, retain the venomous matter in the body; increaſe the pain, fever, heat, and danger; excite anxiety about the precordia, the hiccough, ulcers in the mouth, vomiting of blood, inflammations in the bowels, and a mortal gangrene; or throw the patient into a continual cholic, with an obſtinate conſtipation of the bowels, into the gout, hectic fever, jaundice, tympany, œdematous tumors, the dropſy itſelf, and even abſolute lameneſs. However, I rather chuſe to leave it to Dr. Degner and Tiſſot, to expreſs my ſentiments on this ſo much admired aſtringent and conſtipating method of cure.

Degner ſays; "In the dyſentery at Nime-
"guen, the empirics were unanimous in mak-
"ing it their ſole endeavour to put a ſtop to,
"and retain the alvine flux, little caring whether
"the morbific matter were ſufficiently evacuated

"or

" or corrected. The too early and copious uſe " likewiſe of narcotics and opium, had a bad " and even mortal event, as the remiſſion of the " pains and flux ariſing from thence was very " deceitful. The phyſician and his patients " grew too ſecure, and the hoſtile attacks of the " malady were leſs vigorouſly withſtood, than " they ought to have been; whilſt one ſunk into " an eternal ſleep, another died of an inflamma- " tion of the bowels, and with others the looſe- " neſs ceaſing for a few hours or days, returned " afterwards more violent than before." In another part of this excellent phyſician's work, I find he is of opinion, that thoſe who give aſtringents in the dyſentery, keep the ſnake ſhut up in the patient's boſom, by hindering the efflux of the acrid peccant matter out of the body, whence proceed inflammations, ulcers, gangrenes, and death.

Tiſſot ſays; " The very worſt method of " cure, is juſt that which is moſt followed. The " evacuations are cohibited either by aſtringents " or opiates; a fatal method, that ſweeps away " yearly a great number of perſons, and throws " others into incurable diſtempers. By retaining " the excrements, the wolf is ſhut up in the ſheeps- " fold. The matter that remains behind, irri- " tates and inflames the inteſtines; from which " inflam-

" inflammation arife intolerable pains, an acute " inflammatory cholic, and afterwards either a " gangrene and death, or a fcirrhus that dege- " nerates into a cancer, (of which I have feen a " dreadful inftance) or elfe by fuppurating, " brings on an abfceſs or an open ulcer. Very " often the matter is repelled elfewhere, and " produces indurations in the liver, anxieties " about the precordia, apoplexy, epilepfy, rheu- " matic pains, fore eyes, and incurable cutane- " ous diforders. Such, fays Dr. Tiffot, are the " effects of all binding and narcotic medicines, " as the theriaca, mithridate, and diafcordium, " when they are given too early in this diftem- " per. I was once called in to a very terrible " rheumatic cafe, caufed by the theriaca be- " ing given on the fecond day in the dyfentery."

Having premifed thus far from the obfervations of others, I now come to the main point, namely, to what our own experience has taught us in this epidemy, with refpect to binding, conftipating, and aftringent remedies. I could have been furnifhed with an infinitely greater number of cafes from all parts, if people had not carefully buried in filence thofe faults, againft the commiffion of which they had been fo earneftly and urgently cautioned; and if mankind did not ufually ceafe to be fincere, as foon as they perceive that they are obferved.

A young ſkinner at Arau, put a ſtop to his dyſentery by means of oatmeal-gruel, a remedy preſcribed by the phyſicians of Bern in 1750, which he made very thick, and by the uſe of it, became lame hand and foot; in December he could neither walk nor work, his hands and feet were immoveable, and were perceived to wither away daily.

A man of forty years in the county of Lentſburg had the dyſentery; a quack gave him a reſtringent medicine, his looſeneſs diſappeared, and immediately he fell into a rheumatiſm, that tortured him to the height of deſpair.

A country girl of eleven years, in the ſame county, got from a hangman * ſome reſtringent medicines, on the eleventh day of her diſorder; immediately upon this her pains and looſeneſs diſappeared, and on the contrary her feet and abdomen were ſwelled up, and remained in this condition till her death, which followed in leſs than a month.

A peaſant of thirty years of age, from Solothurn, had the dyſentery; the ſame hangman gave him what he called his opiate drops, on taking which he began to ſwell, and loſt the uſe

* Who in ſome parts of Germany, practiſe phyſic with great ſucceſs; eſpecially in deſperate caſes, when the patient is given up by the phyſicians.

of

of his hands and feet. Towards the end of December, he was carried about in Arau from one phyſician to another, imploring their aſſiſtance.

Our peaſants that were troubled with the dyſentery, often drank likewiſe warm milk. This ſeemingly innocent remedy, was in ſome important caſes very noxious; their ſtools were leſſened by it, and even entirely ſtopped; the patients were ſeized with a violent pain in the limbs, and a total relaxation and wearineſs, that made them unfit for all kinds of work.

At leaſt in Thurgaw Dr. Keller perceived no peculiar good effect from milk, and ſtill leſs from oil. To beſure many people boaſted, that they had cured themſelves by drinking plenty of milk warm from the cow. This happened without doubt, where there was only a purging to be cured, if at the ſame time they uſed a good diet; but in a real dyſentery, Dr. Keller obſerved very little benefit proceed from milk.

In the ſame city Dr. Dummelin, town-clerk at Frawenfeld, ſaw two children, one ten and the other thirteen years old, who at the beginning of their dyſentery, had been made to drink plentifully of warm milk from the cow, directly upon which they complained of a painful contraction

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and oppreſſion of the ſtomach, after which a vomiting enſued, whereby the milk they had taken, was brought up curdled into a cheeſy matter moulded into the ſhape of dogs excrements; upon this convulſions enſuing, both the children died in a few days. Dr. Dummelin remarked the ſame bad effects of milk on children, in the epidemical dyſentery of 1738 and 1739.

This year all kinds of binding, conſtipating, aſtringent, and ſoporific medicines, of all ſorts, forms, and colours were made uſe of in Thurgaw. The moſt famous ſpecifics among the common people, were red wine with pepper, mutton baked in ſuet, brandy, and acorns pounded and boiled in red wine; moſt of them died, but ſome recovered. Acorns are indeed adviſed by the Proviſion of 1750, (iſſued out by the college of phyſicians at Bern) as a good remedy; on the contrary, the Council of Health at the ſame place, has forbiden them as noxious, in an edict read in the churches the very ſame year. In ſhort, acorns are extremely aſtringent, and excite the moſt obſtinate conſtipations of the bowels.

Moſt of the country people of Thurgaw, made uſe of cakes compoſed of mutton fat with

eggs

eggs and mint, under the denomination of approved family medicines. Many took powdered tormentil root, others lapis hæmatites, others gun-powder in a ſoft boiled egg, and others made uſe of garlick. Thoſe that were only attacked with a purging, or had but a ſlight attack of the dyſentery, found no bad effects from theſe things. But in ſevere ſickneſſes, a great wearineſs over the whole body was the conſequence of ſuch meaſures; and the patient fell into a dropſy and cachexy.

The barber-ſurgeons of the villages in Thurgaw, began their cures for the moſt part with aſtringent medicines. In all their patients the malady was extremely heightened, and commonly death was the reſult; ſo that theſe beard-doctors were at laſt forced to confeſs, that the diſorder was above their reach.

A practitioner of Thurgaw limited his whole method of cure to two remedies. The firſt day he gave a mixture of ipecacuhana and rhubarb, the ſecond Sydenham's liquid laudanum, and kept to this laſt, till the purging remitted. On the firſt of December, when I received this account from Thurgaw, all this practitioner's patients without exception were dead, either of a dropſy or a terrible rheumatiſm, or elſe lay

eagerly expecting the near approach of friendly death. In the mean while, the people of Thurgaw were too ſtupid to ſee into the deletoriouſneſs of the method purſued by this deſtroying angel, though manifeſted by ſuch flagrant proofs. Half Thurgaw cried out, that theſe people did not die of the dyſentery, but of the dropſy and rheumatiſm.

In the city of Solothurn, the uſe of aſtringents and aromatics, according to the obſervations of the excellent Dr. Gugger, increaſed the tormina and fever, and produced a gangrene in the bowels. But nothing had more fatal effects, and was more certainly mortal, than the improper application of laudanum.

To the effects of a dyſentery treated with reſtringents inſtead of good ſmart purges, I aſcribe the caſe of an Engliſhman of diſtinction, whom I reſcued from the moſt imminent danger by the means of purgatives and antiſeptics; while at the ſame time, without doubt, many a timorous phyſician by leaving the dyſenteric matter in the body, would have left the patient in his diſorder.

This gentleman came into my neighbourhood from Florence, on the 7th of Auguſt. He

He had been eleven days before attacked with a dyſentery, not far from the Baromean iſlands. The Italian phyſicians gave him indeed manna twice in the beginning, and the firſt time a pretty ſtrong doſe of it; but directly thereupon endeavoured to put a ſtop to his flux, by means of opium, and other reſtringent and binding medicines. The ſick gentleman in the mean while haſtened towards Switzerland with the dyſentery upon him, and taking theſe medicines; he performed his journey in the hotteſt weather imaginable, on horſeback, as one is obliged to do in this country; the exerciſe of riding ſeemed to hearten him; he came luckily on the cloud-capt top of St. Gothard's, from the ſultry air of Italy, into a piercing cold region. An Italian phyſician, whom he had taken to accompany him in his journey, gave him every evening a reſtringent medicine. But nature was wiſer than art; for the gentleman, after two uncommonly large ſtools, which his phyſician undoubtedly did not mean he ſhould have, and which he nevertheleſs had on the ſixth or ſeventh of Auguſt, on his arrival at Zurich, found himſelf well. In this condition he came the ſame day into our parts, where he intended to reſt himſelf a little after the fatigue of his journey, and give himſelf up to my care for his perfect recovery.

I found him perfectly hearty, without the leaſt diſagreeable ſenſation in his abdomen, without the leaſt irritation to a ſtool, without fever, and not very weak. Notwithſtanding this, as I thought the matter was not ſufficiently evacuated, I therefore adviſed him to take in the morning and evening, a large ſpoonful of the tincture of rhubarb made with water, and at the ſame time to ſubject himſelf to a ſtrict diet, ſuch as was proper for his circumſtances.

The eighth of Auguſt he told me early in the morning, that he had had two good natural ſtools, had reſted perfectly well, and found himſelf entirely recovered. I ordered him however to go on with the rhubarb in the ſame manner, till evening, and even at ſupper he found himſelf perfectly well, talked chearfully without interruption, played at cards, and wrote.

The ninth of Auguſt I was called to him early in the morning, in the greateſt haſte. He told me that he had had two ſtools in the night, which were not offenſive to the ſmell, but pretty large; that he had not ſlept at all, had a fever on him, had been extremely reſtleſs, and was ſtill ſo. I found ſcarce any change in the pulſe, and contented myſelf with ordering him to take a ſpoonful more of the tincture of

rhubarb

rhubarb the ſame morning, and every two hours afterwards half a glaſs of almond-emulſion, in the mean while obſerving the courſe of the diſorder.

In the afternoon I found the ſick gentleman in a very diſmal condition. His pulſe was really quicker, and he had a vaſt heavineſs and pain in his head. Towards evening, an uninterrupted ſlumber for ſome hours put an end to thoſe ſymptoms. At the beginning of the night he grew exceſſively weak, and after that doſed till morning, while at the ſame time the fever was very conſiderable. It was however hard for me in this confuſion to determine the ſpecies of his fever. I therefore reſolved to continue till the morning with the almond-emulſion, to ſee if perhaps there was not ſome matter in the body, which it might be neceſſary to evacuate. His head-ach was diminiſhed by the morning, but his pulſe was ſtill pretty quick.

On the twelfth day of his diſorder, on the mere preſumption, that ſome of the dyſenteric matter might have ſtill remained behind in his body, and have putrified by degrees, I gave him two ounces and a half of manna in water, with half an ounce of cream of tartar at one doſe. The effect of this medicine was, that an aſtoniſhing

aſtoniſhing quantity of an extremely fœtid bilious matter came away, with a great number of ſtools, without the leaſt ſenſation of pain in the abdomen, and with the greateſt and moſt perfect alleviation, which further increaſed at every ſtool. The ſick gentleman found himſelf very hearty, and without the leaſt indiſpoſition, till after one o'clock in the afternoon.

At two o'clock came on a violent cold fit, that ſhook his body all over, and continued in this manner for the ſpace of three hours, with an unquenchable thirſt, violent head-ach, and no inconſiderable nauſea. On this cold fit followed a vaſt dry heat over the whole body, and an uncommonly violent fever, attended with great terror and delirium. I now preſcribed an ounce of cream of tartar, ordered it to be divided into twelve doſes, and one of them to be taken every hour in an infuſion of elder flowers; at the ſame time I adviſed him to drink plentifully of lemonade.

The effect of this remedy, was an aſtoniſhing copious excretion of a putrid and inconceivably offenſive matter. At break of day I ſaw this attack end in a ſtinking ſweat, which ſmelled like that of an intermittent fever.

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The third day in the morning I found the gentleman perfectly well again. I prescribed once more a potion of two ounces and a half of manna, and half an ounce of cream of tartar. Again there came away an immeasurable quantity of a perfectly putrid matter. In the evening he found himself very well, and rested well the whole night. I now let him drink nothing else than a good quantity of lemonade.

The fourth day I went early in the morning and found him very chearful, hearty and well. I prescribed him an ounce of cream of tartar to be divided into twelve doses, one of which was to be taken every two hours with lemonade, about noon I was sent for on a sudden. Another equally violent cold fit, shaking the very inmost parts of the body, began at half past ten, and kept on in the most violent manner till one o'clock, during which the patient very frequently vomited, and went to stool. After the cold paroxysm, ensued the same violent parching fit and unquenchable thirst, high fever and delirium, as before. However, the attack seemed inclinable to cease at ten in the evening, and soon after actually did so. I let him go on with the cream of tartar and limonade, according as I had ordered in the morning.

In

In the night time he reſted tolerably well, at leaſt as to his body.

The fifth day in the morning I gave a vomit of half a drachm of ipecacuanha, which worked very eaſy, but did not diſcover any more than before, any unuſual matter harbouring in the ſtomach. During the whole morning there ſtill enſued a great number of very offenſive ſtools, by which the ſick gentleman was very much relieved. In the attack of the fourth day I had remarked, that during this uneaſineſs of mind, which proceeded principally from the nature of the diſorder, the whites of his eyes were intenſely yellow. I feared therefore, that at every future attack, the bile would flow in great quantity into the inteſtines, or return back into the blood; in fine, that from a ſimple putrid tertian fever, it might turn to a double putrid tertian; and conſequently the diſorder of this gentleman, who was of ſo much conſequence to his country, might grow more and more difficult and dangerous. On theſe conſiderations I reſolved now to make uſe of the bark, and to give a full ounce of it before the next attack, which according to the premature courſe of the diſorder, might be expected on the fourteenth of Auguſt, at ſix in the morning. At two in the afternoon I made a beginning,

ginning, and by four o'clock in the morning the whole ounce was conſumed. His ſtomach roſe againſt the bark, and a ſtrong irritation to vomit enſued, and with theſe his uſual anxiety of mind. I had it in my power to put a ſtop to his vomiting, but I let his ſtools, which were pretty frequent, take their courſe; as I did not look upon them in a bad light, but merely as the effects of the bark.

In the evening and beginning of the night the pulſe was unequal and fluttering, and at times quick; however, this I attributed to the condition of his mind.

On the ſixth day his pulſe was juſt as it ſhould be, from early in the morning till nine o'clock, and the gentleman himſelf very chearful. After ten he had a little ſenſation of cold in his body, but nothing like a regular ſhivering fit, though his hands were at the ſame time perfectly warm. After eleven o'clock his dejection of mind came on, and upon that a middling heat, that continually increaſed, and towards evening became very conſiderable, being attended with much fever, and an uncommon depreſſion of ſpirits; after eight o'clock this attack, already moderated by the bark, had an end. The whole day throughout I had given him

no

no medicine at all. I now preſcribed an ounce of bark, ordered it to be divided into ſixteen doſes, and one of them to be taken every two hours, beginning from ten in the evening; whence at each time during the whole night enſued a very offenſive ſtool, but no irritation to vomit.

On the ſeventh day the fever came to a perfect intermiſſion, though the patient was not free from a dejection of ſpirits very natural in ſuch circumſtances, which towards evening bordered upon abſolute melancholy. Till eleven at noon a ſtool followed upon each doſe of the bark, which he now took every hour. His urine, which ſince the acceſs of the fever, had come away in ſtreams, was ſtill bloody. He paſſed the night ſleepleſs, but entirely without fever.

On the eighth day * he was perfectly chearful all the morning long, the brighteſt ideas ſhone in great profuſion through his whole diſcourſe, and his departure was abſolutely fixt for the next morning.

* The fever ought to have come again, but not the leaſt glimpſe of it appeared during the whole day.

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On the ninth day he ſet off on his journey. I gave him another ounce of the bark, which he was to conſume in the ſpace of that day, the ſeventeenth of Auguſt; I adviſed him to take an ounce more on the nineteenth; and a week afterwards, and ſo on, to repeat the ſame quantity, in order to prevent a relapſe. I cautioned him very ſeriouſly not to take any purgative medicine within the ſpace of a month, if he had not a mind that his fever ſhould directly return. I adviſed him in the mean time to live entirely upon vegetables.

The ſecond of September 1765, I had an account from ſome diſtance off, that this gentleman found himſelf quite well on the twenty-fourth of Auguſt. But the phyſician, whom he had at that time conſulted, had thought it neceſſary to add rhubarb to the bark, on which his fever had returned directly the very ſame day; however, it was at that time cured by another phyſician. On the ſixteenth of September the Engliſh gentleman wrote me word himſelf, that he now perceived no difference between one day and another, and was in perfect health. And indeed, ſince this time he has always had the beſt health in the world; and enjoys at preſent, in the ſixty-fourth year of his age, ſuch alacrity and ſtrength of mind, that he actually

tranſacts

tranſacts the moſt important and perplexed ſtate affairs, with unſpeakable facility and great reputation.

After this long but uſeful digreſſion, I reſume the thread of my diſcourſe, and haſten to relate the noxious effects of aromatics, brandy, and wine in our dyſentery.

Aromatics and wine in general, excite in dyſenteric perſons a dangerous irritation in the bowels, increaſe the pain, fever, and ſtrangury; and when they operate as aſtringents, (which however does not often happen) they produce all the above-related bad effects of thoſe dangerous medicines; change the bloody excretions into a thin pus; and wine in particular excites a very dangerous ſenſation of anxiety in the pit of the ſtomach, that very often accompanies an inflammation of the bowels, or precedes it or a gangrene; but which ought not to be confounded with that oppreſſion of ſpirits, that appears directly at the beginning of malignant dyſenterics. Brandy is here an abſolute poiſon, and all theſe remedies occaſion, even in convaleſcents, a moſt dangerous relapſe of the ſame diſorder. All the Swiſs phyſicians, that find the peaſants, who are attacked with the dyſentery, in a very perplexed condition, have the blame to lay on the

the uſe of binding medicines, and their beloved kitchen phyſic; but chiefly to nutmegs, mace, ginger, pepper, wine and brandy, which to be ſure keep the dyſentery under for a while, but ſoon afterwards throw the patient into the moſt dangerous diſtempers. Dr. Tiſſot ſaw once eleven ſick of the dyſentery in one houſe. Nine eat fruit, and were happily cured; the grandmother and a favourite child of her's went to their graves; for ſhe took care of the child in her own way with mulled wine, oil, and ſpices, and accordingly it died. She treated herſelf in the ſame manner, and died in her own way too.

Dr. Tiſſot ſaw in like manner a man troubled with the dyſentery, who had drunk about two ounces of brandy, ſuddenly ſeized with a hiccough, which he oppoſed by the external and internal application of aniſeed-water. Upon this enſued an inflammation in the ſtomach, which almoſt brought him to his laſt gaſp; but Tiſſot was his phyſician. However he was ſickly for about a year afterwards, but at length Dr. Tiſſot made him well.

Now all theſe noxious remedies, together with putrid cheeſe, were uſed in great quantities by the country people in our dyſentery: and

alſo by thoſe in the cities, that lived after the country manner. Our peaſants took immediately at the firſt attack of the diſorder, nutmegs, pepper and cheeſe; in a ſlight indiſpoſition they got over it; in ſevere caſes the vomiting continued, the medicines, that were afterwards given them, did not ſtay on their ſtomachs, and thus the patients were brought to their graves. In the county of Lenzſburg the country people, in obedience to the advice of the famous Senertus in the foregoing century, which is ſtill propagated in our times by ignorant phyſicians, univerſally made uſe of red wine and rotten cheeſe in the beginning of the diſorder. Upon this the price of cheeſe evidently roſe; and an innkeeper near Solothurn, not far from Arau, ſold during the dyſentery's raging in the canton of Bern, ſeven hogſheads of red Alſatian wine more than the uſual quantity he otherwiſe conſumed in the ſame number of weeks; accordingly, directly at the beginning of the epidemy in the county of Lenzſburg, a great number of people gave up the ghoſt merely from this intemperate uſe of wine and cheeſe. In like manner the mortality that happened in Thurgau at the beginning of the epidemy, was moſt conſiderable among the great number of ſick, that lived in the whole extent of the ſouthern ſide of Ottenberg, as theſe people notwithſtanding all

the

the admonitions that were given them, continually followed their depraved appetites with regard to wine and brandy. At laſt ſuch of the people of Thurgau, as ſtill remained alive, and were not yet ſeized, grew ſomething wiſer by the conſtant tolling of the bell. They purſued a better diet, and rather had recourſe to the phyſicians, than to the wine-caſk or cherry brandy-bottle.

But this is not ſufficient for me; for I propoſe to relate alſo ſome ſpecial obſervations made in our epidemy, on the dreadful effects of aromatics, brandy, wine, and other things of this nature.

A young woman of twenty years of age in Brugg, had had the dyſentery eleven days to a very high degree. She was under the care of a very ſenſible phyſician, who did me the honour on the eleventh day to call me to the conſultation. The evening before the patient at the inſtigation of an old woman, very famous amongſt us for her ſkill in phyſic, had drank a good deal of wine. On this followed the whole night long, vaſt pains in the abdomen, copious ſtools full of blood, a violent fever, delirium, and cold ſweats. I found too at the time that I was called, her ſtools very numerous, painful, and

bloody; her pulſe extremely quick, and the patient herſelf full of anxiety, and in particular a violent preſſure in the region of the ſcrobiculum cordis, which Morgagni ſays, is not ſeldom the immediate forerunner of death. I did not dare to think of any evacuation; for all things conſidered, I concluded that the wine had already abſolutely occaſioned an inflammation, for which reaſon I ordered nothing elſe, than every two hours two ſpoonfuls of a mixture compoſed of half an ounce of gum arabic, four ounces of water, and one ounce of ſyrup of marſh-mallows; and with it a great quantity of almond-emulſion, rice-gruel, gum arabic clyſters, and the fomentations commonly uſed in inflammations, to be applied to the abdomen. Towards evening ſhe had again a ſhivering fit, but no delirium in the night. The twelfth day I found her ſtools diminiſhed in number, and of a green colour; ſhe complained perpetually of a ſenſe of heat in the pit of the ſtomach. I let her ſtill go on with the ſame medicines, but was deſired to omit the clyſters. During the whole day our patient ſeemed very much relieved, but in the evening her pains, and particularly the teneſmus got again the upper hand. I adviſed them to continue uſing the ſame medicines without interruption, and in the night time to give her two gum arabic clyſters. The next day

all

all the ſymptoms were very much diminiſhed, and in a few days ſhe was perfectly recovered.

A farmer's lad of thirteen years of age, in the diſtrict of Wildenſtein, was taken with the dyſentery. He had the aſſiſtance of a very famous phyſician at Brugg, Dr. Fuchſlin, and was happily cured with purgatives. But the ſeventh day he drank wine, and eat a pretty deal of cheeſe; the dyſentery returned with violent tormina, and a pretty conſiderable loſs of blood; Dr. Fuchſlin cured him once more. A week afterwards he drank wine again, and again eat as much cheeſe as he could ſtuff; the dyſentery returned with ſtill greater violence, and continued a month.

A peaſant eighty years old in the ſame diſtrict, was attacked with the ſame diſorder. He made a ſhift to crawl as far as Brugg; however not to a phyſician, but to a wine cellar, devoured a good quantity of cheeſe, waſhed it down with a quart of red wine, ſtaggered home, went to bed in the moſt dreadful pain, got upon that a bottle of wine from the good-natured parſon of his pariſh, ſent for advice on the tenth day of his diſorder to a quackſalver in the county of Baden, and on the thirteenth day died.

A very hearty and otherwiſe healthy farmer's lad, fifteen years old, in this diſtrict, was attacked with the dyſentery in ſuch a ſlight manner, that he was able to go about with it during a whole week. His mother undertook his cure; gave him a mixture of red wine, cheeſe, nutmeg and pepper, and by the fourteenth day he was dead.

Another of ſixteen years, in the ſame diſtrict, was ſeized in the fields with a ſhivering. The next day he went again to field, complained, when he was there, of a great wearineſs in his members, and directly upon it laid himſelf ſtretched out for half an hour, during a violent ſhower of rain on the wet earth. On the third day he had a perfect dyſentery with great bodily pains; on the fourth a violent vomiting. On the fifth I was conſulted; I gave the uſual remedies; but he took only the emetic, and that with much relief; the reſt of the medicines he threw away and drank wine in their ſtead. The eighth day out of compaſſion I went myſelf to this fellow, and tried to prevail on him in the moſt friendly, genteel, and perſuaſive manner; but I loſt my labour. He did not deſire my aſſiſtance, for he had at that time medicines in the houſe from a

quack-

quackſalver in the county of Baden, and withal a great inflammation in his bowels, of which he died the next day.

A country girl of eighteen years of age, in this diſtrict, was ſeized with the dyſentery. I was applied to for advice, but my patient did not take half the medicines I had ordered for her; but during the time ſhe ſhould have taken them, partly made uſe of an elixir which ſhe got from the charitable parſon of her pariſh, partly of an elixir that her ſtupid mother (who was the oracle of the village) gave her repeatedly in wine. With this the mother made her daughter follow a moſt abſurd diet; ſhe put wine in all her broths, gave her fleſh, curds, and paſtery, that an oſtrich would ſcarcely be able to digeſt; at laſt ſhe threw away all her medicines, ſo that the dyſenteric matter remained behind, notwithſtanding the inſignificant excretions cauſed by the diſorder, and the putrid fever by theſe means was ſtill kept up. On the twenty-firſt day of the diſorder a miliary eruption, and a conſiderable abſceſs in her body made their appearance; the dyſentery continued, and her ſtools remained as before, yellow, green, brown, red, and black. They ſent for the prieſt, whined, prayed, and made uſe of ſuperſtitious remedies, hanging a piece of ſcarlet cloth

about the patient, in hopes of baniſhing the imaginary ſcarlet fever. When all this was of no ſervice, the girl's father aſked advice again of his prieſt, who told him that a ſick perſon, whom I had forbid wine, had drank two bottles, and was perfectly cured. Upon this the father came home like a mad man, and cried with many geſticulations, that his daughter ſhould not only have as much wine as ſhe choſe, but every thing elſe ſhe pleaſed. All this was accordingly done. However, when on the twenty-ſixth day of the diſorder, all this had been of no benefit, her father applied to me once more for advice. Quite aſtoniſhed at the honour he did me, I endeavoured with a friendly earneſtneſs to open his eyes to all this folly, and touched his conſcience in ſuch a manner, that he promiſed me with tears in his eyes never to liſten to a woman any more. I ordered him therefore to give her ſome doſes of cream of tartar, and three ounces of tamarinds diſſolved in water. Theſe medicines brought away a good deal of the uſual matter with much alleviation, after this her ſtools decreaſed, her appetite increaſed, and the miliary puſtles went off by deſquamation. On the twenty-eighth day of her diſorder, her father told me that his wife had given her in the morning a pretty deal of mulled wine, upon which ſhe found herſelf again very ill.

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The good ſucceſs of the tamarinds I lately gave her, encouraged me to try them again once more in this extreme danger, which I pointed out to the father; my patient took the tamarinds, and at the ſame time her mother gave her butter-milk, whey, muſt, and every thing that came into her head. After that they aſked my advice, as I rode by the door, but I gave them no anſwer. On the thirty-fourth day of the malady the patient died.

A wholeſome, hearty, clever farmer's wife of eighteen years of age, in this diſtrict, was ſlightly ſeized with the dyſentery in the third month of her pregnancy. Her mother gave her directly upon it every day three glaſſes of brandy, and at the ſame time white and red wine in great quantities. The firſt effect of this was her miſcarriage on the third day, which was followed by a very great loſs of blood. They went on boldly with the brandy, her legs grew cold, ſhe had a mortification in her bowels, and died the fifth day.

A woman of ſeventy-eight years of age was taken with the dyſentery in Arau, and made uſe of the uſual ſpecific of nutmeg and red wine. The ſecond day of her diſtemper Dr. Seiler, a phyſician of great ingenuity and penetration, was

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ſent for, who found all the ſymptoms of a violent inflammation in the bowels, but notwithſtanding all he could ſay, the woman took a whole deluge of her ſpecific, and died in four days.

A country girl aged fifteen years, in the county of Lenzſburg, lay ſick of the dyſentery; they gave her red wine in the firſt days of her diſorder; on the ſixth day enſued a hiccough, and on the fourteenth, death.

A batchelor thirty-ſix years old, in the ſame county, drank red wine in the ſecond day of his dyſentery. He fell immediately into a delirium, and the fifth day he was ſeized with a continual hiccough, and on the fourteenth by death.

A man forty years old, of the canton of Zurich, was violently attacked with the dyſentery; accordingly he had immediate recourſe to the ſpecific qualities of red wine ſeaſoned with nutmeg. Neither copious bleeding, nor ipecacuanha, which was given afterwards on account of his belching and nauſea, nor cooling purges, nor any other remedies that were given him by an excellent phyſician in Zurich, were capable of abating the violence of this dyſentery, and the in-

intolerable pains attending it. The quantity of blood that came away was ſupernaturally great, and ſo early as the ſecond day the phyſician thought he ſaw in the matter that was voided, the ſigns of a wound in the internal coat of the inteſtines; on the ninth day the patient died.

Under the denomination of approved family medicines, the country people in Thurgau (according to the account of Dr. Dummelin at Frawenfield) made uſe not only of old red wine in different forms and compoſitions, but even applied to melaſſes, genuine brandy, ſpirits of blackberries and juniper; ſuch as were ſeized only with a diarrhœa, or even a ſlight dyſentery got over it; but with moſt people the wine and ſpirituous liquors increaſed the gripes, ſtools, and teneſmus, cauſed a great ſenſation of ardor in the ſtomach and inteſtines, heightened the fever, occaſioned great heat, intolerable thirſt, vaſt horrors, and at length death itſelf.

A man in Frawenfield, that was almoſt got out of danger by the aſſiſtance of Dr. Dummelin, produced ſuch an alteration for the worſe in his dyſentery, by taking a good draught of wine, that a ſingultus enſued, and upon that a vomiting of blood, and finally death.

Many

Many people in Thurgau oppoſed the firſt ſymptoms that appeared of the dyſentery, by drinking plentifully of a mixture compoſed of red wine and ſpices; their looſeneſs was ſtopped, and they began to triumph. After ſome days more or leſs, Dr. Keller of Weinfield, ſaw ſome of theſe fall into a relapſe, which was worſe than the firſt attack; others were in a moſt painful and miſerable condition, which (as Dr. Keller expreſſes it) was a perfect aſſemblage of all the evils that plague mankind. At the leaſt touch of any thing beſides the bed-cloaths, they ſuffered in the part offended ſuch violent pains, that they broke out into dreadful howls, and gave the utmoſt tokens of deſpair. Dr. Keller had two of theſe wretched victims to popular ſelf-conceit under his care; and cured them both with copious bleeding, and the long-continued uſe of antiphlogiſtics.

The ſick in Thurgau to the north of Ottenburg, who did not follow the moſt ſtrict diet, and in particular did not entirely abſtain from brandy, wine, and fleſh, died almoſt all of them between the ninth and twelfth day.

In Swabia too, according to the obſervations of Dr. Moehrlin, nothing was more noxious and dangerous in the dyſentery than wine, except brandy,

brandy, which was ſtill more ſo. Thoſe (ſaid Dr. Moehrlin) that in the courſe of their illneſs drank wine, could not be ſaved. Such, as juſt before their being attacked with the diſorder, made uſe of wine and brandy by way of preſervatives, had it uncommonly violent and long, and were alſo at the end of it troubled for many weeks after with obſtinate œdematous ſwellings.

A woman in Ravenſburg had put a ſtop to her dyſentery by the copious uſe of red wine; the effect of this was a great wearineſs, a pungent and excruciating pain in one leg, at length a perfect arthritis (which rendered her incapable of moving in her bed) and a great difficulty of breathing.

At length a caſe very appoſite to illuſtrate this ſubject came by chance into my hands, from which I immediately made the following extract, and which deſerves a place in the very important doctrine of the gradation of diſorders, as well as the above-mentioned caſe of the illuſtrious Engliſhman, which fell under my own obſervation.

A lady of diſtinction in Swabia was on the eleventh of June, 1765, attacked on a ſudden with

with a looſeneſs, which was at length attended with gripings and a bearing down in the rectum. On the fifth day ſhe took of her own head a doſe of Engliſh ſalts; this in the opinion of the phyſician, who is the author of this account, produced a very bad effect, as her ſtools became bilious upon it; ſomebody gave her beſides this the ſame day, eighteen drops of a diſtilled oil.

The ſixth day the phyſician of the place was called. He found her in the condition juſt deſcribed, that is to ſay with the dyſentery on her; and gave her a drachm of powder of rhubarb, which worked her pretty ſtrongly, and tinged her ſtools with blood. Without any longer delay he proceeded directly with a powder compoſed of coral, cryſtallus montana, cornu cervi uſtum, dragon's blood, and caſcarilla.

On the eighth day another phyſician was called to his aſſiſtance. The patient had ſtill ſome twitchings in the bowels, and her ſtools were mixt with blood; her two phyſicians gave her a powder of gum arabic mixt with a little caſcarilla, to be taken in an almond-emulſion or barley-water.

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On the ninth day the patient had in the morning a pretty natural ſtool, but again in the evening a dyſenteric evacuation with gripings and pain in the upper part of the fundament. Both the phyſicians upon this added to the powder the incomparable theriaca. On the tenth day ſhe had ſome few pretty good ſtools, without any bearing down, though they were ſtill mixt with pure blood; the pain about the os ſacrum ſtill remained, and her pulſe was natural; her phyſicians now mixt with the abovementioned powder, inſtead of the caſcarilla, two grains of jeſuits bark. On the eleventh day her ſtools were very good, upon which her phyſicians gave her every five hours ten grains of the cortex without any additition, in order to ſtrengthen her ſtomach and bowels; in the afternoon ſome hyſteric ſymptoms appeared, upon which account they added to each doſe of the bark, one grain of extract of caſtor.

On the twelfth day ſhe was in the ſame condition, and towards evening ſhe had her menſes. The phyſicians ordered her to lay aſide her medicines; on the other hand, they indulged her with two ſpoonfuls of Burgundy wine every ſix hours, upon her earneſtly aſſerting, that whenever ſhe was attacked with hyſterics, even tho' they were attended by a fever, a glaſs of Burgundy

gundy was her beſt remedy. They found upon this with great pleaſure, that her pulſe roſe after taking this wine, for which reaſon they allowed her on the fourteenth day to take two ſpoonfuls of Burgundy every four hours, and one of them took his leave.

On the ſame night the phyſician who was retained, was informed, that the lady was again ſeized with the hyſterics, upon which he ſent her directly a grain of extractum croci. On the fifteenth day, early in the morning, the phyſician went himſelf; he found her in great terrors, with ſpaſms, reſtleſſneſs, heat, great thirſt, and a quick, violent, irregular pulſe. This ſudden attack of a manifeſtly febrile diſorder, the phyſician miſtook for the effect of a fright ſhe had had the preceding evening; in conſequence of which he gave her only ſome remedies for her fright, and in particular the pulvis margravii with the extract of caſtor.

On the ſixteenth day the other phyſician returned. The lady lay ſince the morning in violent, and almoſt intolerable terrors, and complained moſt of a very great anxiety and weight at her breaſt; the fever, with all its ſymptoms, was more violent than the day before. Her phyſicians gave her again nervine remedies;

remedies; namely, two grains of the pulvis margravii, with a grain of extract of caſtor, to which they now added two grains of nitre. In the evening the lady had two ſtools, in order to prevent any more of which, her phyſicians gave her inſtead of the pulvis margravii, an addition of coral to the powder compoſed of the extract of caſtor and nitre, to be taken every four hours.

The ſeventeenth day early, the lady had convulſive twitchings in her right arm. Theſe increaſed ſtill more and more, and came by degrees into the left arm, at length to her head, where they manifeſted themſelves by contorſions of the eyes, noiſe in the ears, and diſtorſions of the mouth and countenance; her eyes grew red, muddy, and dim, her face bloated and livid, and her reaſon troubled. The phyſicians thought of taking away ſix ounces of blood, upon which every thing was on a ſudden quieted. In the afternoon the patient had only now and then a depreſſion of ſpirits, which however ſoon vaniſhed. The whole night throughout ſhe was pretty quiet.

The eighteenth day in the morning the lady had a very profuſe and extremely fœtid ſweat,

which however went off by reaſon of their having taken the precaution to change the ſheets. Upon this followed inſupportable terrors, with violent convulſions, and ſpaſmodic reſpiration; her eyes were ſtaring and diſtorted; her thirſt unquenchable, and her pulſe tremulous; her phyſicians tried in vain to recall the ſweat; with this view they took away four or five ounces of blood, upon which the ſymptoms remitted, but did not abſolutely ceaſe. After this they gave her nothing but ſudorifics; the ſymptoms at firſt increaſed, but at length diſappeared about noon, when ſhe had a ſmall evacuation; in the afternoon the ſame ſcene was going to be played over again; but upon the ſudorifics being repeated, the ſymptoms diſappeared, and at the ſame time the ſweat. In the evening the lady complained of a violent wandering pricking pain in her breaſt and abdomen, and ſaid ſhe found ſomething in many places rolling itſelf up like a ball; the pain in her belly diſappeared on the application of warm napkins, but remained the whole night in her breaſt.

The nineteenth day early ſhe broke out again into a ſweat, by means of which the pains of the abdomen went off. At firſt the patient appeared pretty quiet; but by degrees they remarked a diſtorſion in her eyes and countenance,

nance, her muſcles ſeemed convulſed, and her arms contracted. The lady ſaid, that at times ſhe ſaw ſomething frightful, and ſomething was obſerved in her converſation that was not natural to her. Both her phyſicians upon this took it into their heads, probably on account of their apprehending ſome malignity in the diſorder, to apply a warm hen cut up alive to the ſoles of her feet, and another to her head, which was accordingly done. In half a quarter of an hour the lady was quieter, and the phyſicians took courage again; as ſhe ſaid, that from the application of the hen to her head and feet, ſhe felt an agreeable ſenſation in the back. In the mean time about noon, a delirium enſued, and ſoon after that a ſhort ſlumber, out of which ſhe never awoke.

To this remarkable hiſtory the following account was added by one of the deceaſed lady's phyſicians. In her firſt illneſs, which was manifeſtly a dyſentery, her pulſe was never extraordinarily feveriſh, and when ſhe was free from hyſterical attacks, quite natural. Theſe attacks were repelled by the uſe of foot-baths, aniſeed, cinnamon, mint, and chamomile-waters; in her ſecond illneſs her pulſe was as irregular as poſſible, though always quick, with

a violent and continual heat; her urine in ſmall quantities, thick, of an extremely high red colour, and without ſediment: her ſtools were liquid, of a whitiſh yellow colour, and at times covered with froth.

Both her phyſicians joined in roundly declaring, that they were not aſhamed to ſubmit the hiſtory of this diſorder to the judgment of every ſenſible man; upon an impartial reſearch they muſt neceſſarily be allowed to have done right; that the phyſician cannot always cure, and that the diſtemper is ſometimes too much for his art, though exerciſed with the greateſt judgment. In fine, they both concluded in a manner which I did not expect, viz. what external preceding cauſes have occaſioned the dyſentery to turn to a violent convulſive diſtemper, is notwithſtanding all our reſearches to us ſtill hidden and enigmatical.

With theſe learned gentlemen's leave, the evident, true, and only external cauſe of this fatal change of the diſtemper into an acute one was, the Burgundy wine; and the evident, true, and only internal cauſe of this change, was the not ſufficiently evacuated, though difficultly retained dyſenteric matter.

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From this collection of obſervations and experiments it is clear, that aſtringents and conſtipating medicines, ſpices, brandy, and wine, were very noxious, and always extremely dangerous in our dyſentery; and that it would perhaps be worth while to weigh in the ſcale of humanity that political maxim, "Where no "accuſer is, there is no judge."

CHAP. VII.

Remarks, Obſervations, and more determinate Concluſions, with regard to the Diagnoſis and Cure of moſt Species of the Dyſentery.

A STRICT enquiry into, and preciſe determination of the different kinds and ſpecies of the dyſentery, which next to the plague and peſtilential diſorders, is one of the moſt dangerous, and at the ſame time, one of the moſt common diſtempers that infeſt mankind, muſt, I think, neceſſarily have a great influence on the conduct of the phyſician, that intends to cure it. An eſſential diſtinction is uſually made between a dyſentery with fever and one without fever, a benignant and malignant, a contagious and not contagious dyſentery. Without the moſt abſo-

lute and preciſe inſight into the truth or falſehood of theſe diſtinctions, it is impoſſible to have a good ſyſtem in one's head; and without a genius for practice, in intricate and irregular caſes, a man appears like a fool at the bedſide of his patient, with all the ſyſtems in the world.

The eſſential diſtinction that is made between a true dyſentery with fever, and one without fever, appears to me to have a very dangerous tendency, and, in my opinion, ſhould be baniſhed from the ſchools of medicine; as it rather determines the limits between a dyſentery and a diarrhœa. To be ſure, the fever that accompanies the dyſentery, ſeems very often at firſt almoſt inconſiderable; upon which account many phyſicians affirm, that the dyſentery is ſo far from being attended with a fever, that its concomitant ſymptoms are of an almoſt oppoſite nature, viz. a pale face, the pulſe not quicker than uſual, and ſmall, and the diſorder of long continuance. But chillneſs, weakneſs, and loſs of ſtrength on the firſt attack, are however the uſual forerunners of a genuine fever, and theſe are never wanting in the regular attacks of a true dyſentery. It is true, that the pulſe in the firſt days of the diſeaſe, is very often not quicker than common, and very ſmall; but

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it appears to be manifeſtly quicker in the courſe of the diſorder, and often extremely ſo. I even ſaw ſome caſes in a dyſentery of the putrid kind, in the epidemy of 1766, commence with a very high fever, and terminate very happily; while others began with a fever that could hardly be perceived, which however ended in death. In the firſt caſe the patient's countenance was as red as fire, in the latter, pale. I find this fever of ſtill more conſequence, when all the other ſymptoms are bad, when the patient loſes all his ſtrength, and the pulſe is at the ſame time not quick, but extremely weak; for in this caſe there is an undermining malignant fever, or even a gangrene lurking behind the curtain. In thoſe that lie ſick of the dyſentery, the fever ſometimes, and that even on the days immediately preceding the death of the patient, ſeems to be quite vaniſhed, while, at the very ſame time, the inflammation is haſtening on to a gangrene. Upon this account, the effects of the dyſentery have been very aptly compared to the effects of arſenic; as this, juſt like the dyſenteric matter occaſions reachings, copious ſtools which corrode the bowels, pains at the heart, terrors, intolerable belly-achs, inflammations, gangrenes, and death, without any conſiderable fever being at the ſame time to be obſerved. In fine, the length of the malady is no argument

in this caſe, as the worſt fevers in ſome particular circumſtances viſibly run out to a great length; eſpecially the fever with us, ſometimes very improperly, called putrid. Though theſe obſervations made at the bed-ſide of the patient, are not very agreeable to the greateſt part of our ſyſtemwrights, they are however of the greateſt conſequence; as many pre-occupied with a notion, that in a dyſentery of this ſort the pulſe muſt be neceſſarily very quick, think it accordingly ſlight, and of no ſignification, when in this point of view the fever is imperceptible. This error was, according to Degner's account, very dangerous to many perſons in the dyſentery at Nimeguen, in 1736; and upon that account, I do not ſee why Dr. Akenſide appeals directly to that epidemy, in order to prove, that the dyſentery is not attended with a fever.

Sydenham calls the dyſentery a fever turned upon the bowels. This mode of expreſſion, I muſt own, does not perfectly pleaſe me, as it is not taken from the conſideration of the principal phænomenon: this diſtinction, however, ſeems to comprehend the very eſſence of a genuine dyſentery; and I am convinced that this diſorder ſhould be treated ſometimes as an inflammatory, ſometimes as a bilious or putrid fever, ſome-

ſometimes as a fever compounded of both, ſometimes as a malignant fever, and ſometimes as a bilious one, accompanied with manifeſt tokens of malignity; but I am ſenſible too that there are many caſes, in which it is equal how they are treated. I conſidered this year's dyſentery in all ſerious caſes, as a bilious or putrid fever; for I ſhould have been much miſtaken, if I had looked on it as a mere inflammatory caſe, and accordingly breathed a vein, and given neither vomits nor purgatives; or, if I had taken it for a malignant diſorder, and accordingly allowed my patient wine, and ſtrengthening remedies. Some phyſicians were, to be ſure, very liberal in letting blood in our dyſentery at Thurgau; as they (perhaps induced by an hypotheſis) preſuppoſed an inflammatory ſtate of the blood in all their patients, and indeed might very naturally imagine this to be the caſe, on account of the propenſity of our countrymen to drinking. It may be, that in that part of the country, the dyſentery in many perſons was a complication of inflammation and putridity together; at leaſt it happened to be ſo with us, towards the end of ſuch diſorders as proved mortal; and indeed, as I imagine, is generally the caſe in theſe circumſtances, juſt before the diſorder terminates in death, excepting where there are other peculiar cauſes ſubſiſting for the

the patient's death, totally different from this. We ſhould however be very careful to diſtinguiſh, whether this complication ſhews itſelf at the beginning of the malady, or whether it only accompanies the fatal turn of the diſtemper. It is not impoſſible, that it ſhould happen in the beginning of the ſickneſs; and it was obſerved to do ſo in our putrid pleuriſy, to which an inflammation of the lungs was often joined even at the beginning, that made emetics, which would otherwiſe have been of ſo much ſervice, prove fatal to the patient. In like manner that kind of pleuriſy, which entirely belongs to the bilious, or (as it is called) putrid claſs, and all other ſimple putrid fevers often, like the dyſentery, terminate juſt before the mortal criſis, in an inflammation and gangrene of thoſe parts on which the putrid matter has ſettled. But I alſo hold it as a very important maxim in the exerciſe of our art, and perhaps not ſufficiently taken into conſideration even by ſome great phyſicians, that we ſhould be very careful not to confound the divers periods of a diſorder one with another, nor to take from what happens towards the end of the ſickneſs, and ſtill more eſpecially from the dead body, the indications of what is to be done at the beginning.

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There are many circumſtances, which occaſion the junction of the dyſentery with a malignant fever; but eſpecially, when many ſick people lie together in a narrow place, when the chambers are neglected to be aired, and in general, when little or nothing is done, that the rules of our art require to be done in ſuch caſes. This fever may attack people in health, without being attended with the dyſentery, though it ariſe from the putrid and confined vapours of that diſtemper; it may however ſupervene on the dyſentery, and in this caſe it will be of a perfectly peſtilential nature.

After the battle of Dettingen, the dyſentery immediately made its appearance in the Engliſh army, and committed great ravages in it during the month of July and part of Auguſt. The hoſpital was in the village of Fechenheim, about a league from the camp; during the time that the army lay near Hanau, about fifteen hundred ſick, beſides thoſe wounded in the field of battle, were brought from the camp into this hoſpital, and among theſe the greateſt part was ill of the dyſentery; the air was by theſe means infected to ſuch a degree, that not only the reſt of the patients, but even the apothecary, nurſes, and the other ſervants, with moſt of the inhabitants of the village were infected.

fected. To this was added a ſtill more alarming diſtemper, namely, the jail or hoſpital-fever, the common effects of a foul air, proceeding from a great throng of people, and animal corruption. Both theſe together occaſioned in ſo ſhort a time as the month of July and part of Auguſt, a great mortality in the village: while on the other hand, thoſe that were attacked with the dyſentery, but were not removed from the camp into the hoſpital, remained free from this malignant diſeaſe, and were happily cured; although they were in want of many conveniencies, which the others in the hoſpital enjoyed. After the Engliſh army had marched away for the Netherlands, in September 1743, three thouſand ſick were left in Germany, part in this ſame village of Fechenheim, and the reſt at Oſthofen and Bechtheim, two villages in the neighbourhood of Worms. At Fechenheim the malignant fever and dyſentery grew worſe and worſe every day; few kept free from it, for whether the dyſentery, on account of which the ſick were ſent to the hoſpital, was mild or malignant, this fever was always joined with it. The petechial ſpots, blotches, parotids, frequent mortifications, contagion, and the great mortality, ſufficiently ſhewed its peſtilential nature. In this point of view it was ſtill worſe than the plague itſelf, as here there was always

reaſon

reaſon to fear a relapſe; and it might almoſt be depended upon, if the patient remained in the ſame contagious air. Out of fourteen mates that were employed about the ſick, five died; and all the reſt, except one or two, had been ill and in danger. The hoſpital loſt near half of the patients; but the inhabitants of the village, by the dyſentery and fever together, were almoſt entirely deſtroyed. Now I conclude from all I have ſaid, and eſpecially from the obſervations of that great phyſician Dr. Pringle, that not only a fever of different kinds, for the moſt part accompanies the dyſentery, but that this fever in certain circumſtances, is of the moſt alarming nature.

It is not without reaſon, that a diſtinction is made between a malignant and benignant dyſentery; but at the ſame time, this diſtinction is little underſtood, and occaſions a great many miſtakes; as a diſorder is often called malignant, which in reality is not ſo; and malignancy is often leaſt ſuſpected, where ſlily undermining the conſtitution, by ſlow advances it gets at laſt the maſtery, and overturns every thing.

It is undeniable, that many dyſenteries are of a good, and others of a bad ſpecies; that ſome

ſome only attack one here and there, while others at once, with their peſtilential miaſmata, infect the whole country. There is a kind of dyſentery peculiar to the iſland of Java, in the Eaſt Indies, which is commonly of a benignant nature. Its beginning and progreſs is very ſlow, the ſtools are not very copious, the pains not great, nor the weakneſs conſiderable. A ſlight, and often imperceptible ſhivering, which does not eaſily return in the courſe of the malady, without ſome error committed in diet, uſhers in the diſorder. The ſtools are liquid, yet not copious, inſomuch, that ſuch as are attacked with it, do not ceaſe to tranſact their uſual buſineſs, and commonly do not apply to the phyſician for advice, before three or four weeks are at an end. By degrees the ſtools become more frequent, though at the ſame time they are preceded by little or no pain. With theſe ſymptoms is ſometimes (but not always) joined a teneſmus: the excrements are rather liquid than otherwiſe, ſometimes without blood, and ſometimes variegated with bloody ſtreaks, though at times they are ſomewhat hard, and encircled round about with blood and mucus. The appetite is, in the firſt period of this dyſentery, twice or thrice greater than in health; however, it diminiſhes by degrees, and at laſt is quite deſtroyed. The patient's ſtrength does

not

not remain always at an equal pitch, but decreaſes more and more by degrees, in the courſe of the diſtemper. In this manner it goes on for three, four, ſix, or even twelve months, (according to the obſervations made on it from the year 1742 to 1748, by one Laurich, a German phyſician, who has very well deſcribed this diſorder) and for the moſt part ends in another ſickneſs, ſeldom in death. But we have alſo nearer home, an example of an uncommonly mild dyſentery, with which almoſt all ſtrangers are ſeized during the firſt week of their abode in Paris. I have myſelf had this dyſentery ſo very like the Indian diſorder, in Paris; it does not even confine the patient in the leaſt to his bed, goes off in a few days, and does not even deſerve the name of dyſentery. We ſee very often in Switzerland, and in other particular places, epidemic dyſenteries uncommonly benignant. In general, a dyſentery is called malignant, in which all the ſymptoms that appear at the beginning, are of much more conſequence than they ſeem to be, or in which unuſual ſymptoms ſupervene on a ſudden, or when the beſt remedies, ſelected with the greateſt deliberation, are without the leaſt effect; when many die without the leaſt fault committed by the phyſician, the patient, or aſſiſtants; and when the ſick, as Thucydides ſays of the Athenian

Athenian plague, die as well with, as without the phyſician.

Notwithſtanding this, theſe ſpecies of the dyſentery, partly on account of their frequent complication, and partly by reaſon of their changeable and deceitful nature, are very often not nicely enough diſtinguiſhed in practice. Where the dyſentery rages very much, and kills a great many, there is ſtill always a number of ſlight, and eaſily curable caſes: and in malignant dyſenteric epidemies, there are likewiſe a great many fluxes in the ſame place, that are not malignant. The characteriſtic of malignity itſelf, differs vaſtly in degree: in the city and diſtrict of Zurich, reigned in the year 1746, a dyſentery, only in a ſmall degree malignant. In the ſame year raged in Saxony, a very malignant one, of which in a ſmall ſpace of ground and in a very ſhort time, died an hundred perſons, moſt of them on the third or fourth day, and none after the fourteenth. On the other hand, ſymptoms of malignity may ſupervene on a moderate dyſentery; it may even grow perfectly malignant, or elſe in many other ways dangerous. The benignant ſpecies of dyſentery becomes contagious, malignant, and extremely dangerous, when many ſick people are crouded together in a ſmall ſpace, or where

where peculiar external or internal cauſes, produce malignity in particular perſons. It is not only poſſible for a putrid fever to ſupervene on the ſlighteſt dyſentery, but this fever may likewiſe terminate in a gangrene of various parts of the body, at the ſame time that the inteſtines are abſolutely free from any ailment of that ſort. However, moſt dyſenteries end at laſt in a real mortification of the bowels, if they are not properly treated directly at the beginning; or when certain circumſtances prevail, that render the beſt method of cure abortive. But when theſe do not take place, they go off very eaſily and terminate very happily, or elſe ſeem uncommonly mild, merely on account of their being taken care of in a proper manner. In Sir John Pringle's opinion, a dyſentery that has once got a good footing, is ſo fixed and obſtinate, that it can ſcarce ever deſerve to be called benignant. But I ſhall ſhew hereafter, how much the word malignant is abuſed.

The dyſentery then is often more or leſs, either of itſelf primarily malignant, or generally ſpeaking, dangerous; merely according to the preſence or abſence of certain circumſtances. It appears in the army ſometimes as early as the ſpring, when the troops have firſt taken the field; but is never ſo obſtinate, nor ſo frequent

quent as towards the end of ſummer, or the beginning of autumn. At this time it grows epidemical and contagious, continues for about ſix weeks or two months, and then ceaſes; it is always more violent, if the troops lie wet in warm weather. It has alſo been obſerved, that the dyſentery is always the more malignant, the earlier in the ſeaſon it makes its appearance; and that it manifeſts much leſs virulence, when it does not break out till Auguſt or September. Otherwiſe I do not ſee that theſe camp-dyſenteries are in themſelves more malignant, than thoſe that happen in cities; although in the army and military hoſpitals, they become exceſſively malignant and contagious from ſeveral circumſtances; which, however, in like manner, take place in cities, when a great quantity of people attacked with this diſorder, are crouded together in a ſmall place, or where the other different cauſes ſubſiſt, of a peculiar or general malignity.

There are in all places dyſenteries, in which the diſtinguiſhing characteriſtics of malignity are obſervable. A malignant dyſentery ariſes, whenever that degeneration of the humours, which produces a malignant fever, is joined with thoſe cauſes, that generally occaſion a dyſentery. Sometimes this conjunction proceeds from cauſes, which are merely peculiar to one

or

or a few particular perſons, and then it only gives riſe to *ſporadic* malignant dyſenteries. Thus we generally ſee, in epidemies of the malignant fever, here and there a ſick perſon, who is attacked with a malignant dyſentery; and in epidemies of the mildeſt dyſenteries, thoſe whoſe juices are previouſly vitiated, are ſeized with fluxes of the moſt malignant kind, or elſe ſymptoms of malignity on various accounts mix themſelves with the more common ſpecies. The ordinary bilious dyſentery too may become malignant, from violent or frequently repeated fits of anger, as well as by means of a bad method of cure; ſuch as, for example, the adminiſtration of brandy and aſtringents. Dr. Tiſſot ſaw a violent fever, that laſted fifteen hours, enſue on a dyſenteric perſon's drinking a large draught of brandy, at the ſame time his ſtools entirely ceaſed; after this febrile paroxyſm the patient loſt all his ſtrength, the dyſentery returned with an intolerable bad ſmell, he fainted away upon each ſtool, his pulſe was weak and very irregular, and he looked like a perfect corpſe; he next went into a clammy ſweat, and died in forty-eight hours after drinking the brandy. I myſelf have ſeen and cured a dyſentery, probably not naturally malignant, but made ſo by art, and have given a deſcription of it in the former part of this work. But when the conjunction of the general cauſes

of the malignant fever, with the peculiar cauſes of the malignant dyſentery, has its origin in circumſtances of ſuch an univerſal influence, as to produce an epidemy, the certain conſequence of this is a perfectly epidemical malignant dyſentery; that is, a great number of people are at once, or very ſoon one after another, ſeized with a malignant dyſentery. An epidemy of this ſort, is, next the plague, of all others the moſt dangerous, and has likewiſe been ſeen in conjunction with the plague: unuſual and extremely ſtinking vapours, an extraordinary heat, famine, or a camp pitched in marſhy grounds, have often made this dreadful diſtemper epidemic. Bontius ſaw it in Batavia, when this city was beſieged in the years 1724 and 1728, by the people of Japan. In Europe it has been obſerved from 1548 to 1746, and ſtill later, and that principally in France, England, Germany, and Switzerland. In the year 1673, a ſquadron of horſe, conſiſting of ſix hundred men, under the command of the marquis of Laſſingen in Flanders, that had lain too long in ſwampy grounds, was attacked with this dreadful diſorder, which was likewiſe attended with a mortification of the thighs; five hundred and forty dragoons died of it, and at the ſame time a great number of horſes. Beſides theſe manifeſt cauſes, ſuch an epidemy is often alſo an effect of thoſe degenerations of the air, which do not fall un-

der the cognizance of our ſenſes, the terrible influence of which, however, we do but too ſenſibly feel.

Theſe remarks on the difference between theſe ſpecies of the bloody flux, amount to this; that without doubt there are benignant, and as inconteſtably alſo, malignant dyſenteries; but that we ſhould not ſo readily look upon a dyſentery as benignant, when the ſymptoms are not bad directly at the beginning; becauſe in that very caſe, influenced by certain circumſtances, every thing may turn out bad; that it would, therefore, be better not immediately to eſtabliſh for a certainty at the bed-ſide of the patient, what is not ſo certainly eſtabliſhed by nature herſelf.

It is juſt the ſame with its contagious nature. The ſame dyſentery is infecting, or not, according as it varies in circumſtances. Without poſſeſſing of itſelf any real malignity, ſtill a dyſentery often becomes truly peſtilential in foul and crouded hoſpitals, and, of conſequence, ſo much the more infectious. It is on this account, that the dyſentery is ſo common and mortal in the field, and therefore, a conſtant and vaſtly dangerous camp-diſtemper. The great havock made by the dyſentery, proceeds always in the army from the infection, that ariſes from the pu-

trid excrements of many people lying ſick of it at the ſame time; which, without proper meaſures being taken, is likewiſe the caſe in the country villages, and ſometimes even cities. As mild too as this diſorder may appear in the firſt days, yet with moſt of the patients, before it terminates in death, the excrements acquire a cadaverous ſmell, and are then exceſſively contagious. I have found this ſmell ſo offenſive in a woman of eighty-one years of age, during the epidemy of 1766 at Brugg, that the continual keeping open of the windows and door, and perpetual ſcenting the room with vinegar, were not ſufficient to prevent its infection, and two of her nurſes were ſeized with it. Now, ſince a dyſentery that proves mortal, is in a certain meaſure always of a contagious nature, though, to be ſure, it does not always communicate that contagion; it follows hence, that every dyſentery is infectious, which reigns for any time in a country, attacks a great number at once, and has proved mortal to many. This is the more evident, when one conſiders how much fear aſſiſts contagion in every reſpect. In the malignant epidemic dyſentery of 1746, in the city of Zurich, it generally happened, that many that were inhabitants of one and the ſame houſe, perhaps chiefly on this account, were ſeized within a few days with this diſorder, as ſoon as one perſon in the houſe

houſe had got it; for the very ſame reaſon all ſuch as lived together in one houſe, grew much worſe, and very often a great many of them died, when any one in that houſe had previouſly given up the ghoſt. When hoſpitals are filled with dyſenteric people, ſome of the aſſiſtants are attacked only with the dyſentery, and others with the jail, or hoſpital-fever, that ends in bloody and gangrenous ſtools; in general likewiſe, almoſt all malignant fevers without exception infect the aſſiſtants, when there is not proper care taken with regard to keeping the air ſweet, and particularly in removing the putrid ſtools. In the army, the long ſtay of the troops in one place keeps up the havock of the dyſentery amongſt them, which ſometimes on the removal of the camp, goes off on a ſudden; nothing is therefore more wholeſome for armies in ſuch circumſtances, than plenty of exerciſe, and being at a diſtance from the houſe of office, the foul ſtraw, and other naſtineſs of the camp. From all theſe obſervations, made partly by me, and partly by other phyſicians, I conclude, that the dyſentery is very often only accidentally contagious, but that it alſo frequently becomes eſſentially ſo, juſt before the death of the patient; and that, in general, in all epidemic dyſenteries, this diſorder, without the uſe of proper preſervatives, muſt neceſſarily likewiſe be

ſpread by contagion. But I cannot by any means admit with Degner, that contagion is the chief occaſional cauſe of this diſorder with every body.; although, without doubt, the infection is eaſily communicated to linnen, beds and clothes, and thus produces the diſeaſe in ſuch, as are in a condition fit to receive it.

After theſe obſervations on the different genera of the dyſentery, I proceed to its ſpecies.. Juſt in the ſame manner as the former are complicated one with another, ſo are very often the latter: a dyſentery, attended with a putrid fever, may either openly, or elſe in an undermining and almoſt imperceptible manner, be accompanied with inflammation; or the putrid fever may be changed into a perfectly malignant one: and a dyſentery, attended with an inflammatory, putrid, or even mild malignant fever, may, after all, turn out a chronic caſe. However, this ſhould not hinder us from dividing the dyſentery into its proper ſpecies, ſince it appears under ſo many different ſhapes, and ſhould be, without doubt, variouſly diſtributed, according to them, as under each form it muſt be variouſly treated. From this, a perſon of any penetration may perceive, the dreadful difficulties that attend the exerciſe of the medical art: as its objects, namely diſorders, are of ſo unſtable

ſtable a nature, ſo liable to be miſtaken one for another, and even ſometimes ſo variable in their ſpecies.

In dividing the dyſentery into its divers ſpecies, phyſicians have been at all times extremely liberal; they have committed the ſame fault, as Hippocrates blamed in the people of Cnidos, and in which M. de Sauvages is entirely involved in his Noſologia, having made particular and almoſt ſingular caſes of ſo much importance, as to deſcribe them as ſpecies. Degner is, in my opinion, one of thoſe, that have written the beſt on this diſorder: I look on him as a very good obſerver, and, indeed, a very reſpectable phyſician, but yet, not as a man of true genius; for it appears to me, that he was not very capable of joining phænomena together in a proper manner, developing ſufficiently complex ideas, and ranging the heads in a natural order. On the one hand, he has not well diſtinguiſhed our bilious, or, as it is called, putrid dyſentery, from the malignant, though they differ from each other, in his hiſtory of the epidemy at Nimeguen, which was compounded of both ſpecies; and, on the other hand, ſuppoſes the bloody flux, the dyſentery without blood, and the mucous dyſentery, to be quite diſtinct, and different from the bilious. Other phyſi-

cians,

cians, even in this enlightened age, ſpeak of a grey dyſentery; of a dry dyſentery, which I am very well acquainted with, but have made no particular ſpecies of it, and in which they very juſtly adviſe lenitives and emollients; and, laſtly, of an acid dyſentery, which ſeldom happens, and principally affects weakly people: but there is as little reaſon for making a ſpecific diſtinction between a bloody flux and a dyſentery without blood, as between a grey, yellow, green, or black dyſentery. Blood being mixed with the excrements, is indeed an uſual, but not inſeparable ſymptom of the dyſentery; for many have all the other ſigns without this, at leaſt in the beginning, and others have blood in their ſtools for various reaſons, without having the dyſentery. But although this diſorder is very often attended with blood, it does not, however, on this account, deſerve the name of the bloody flux, as the appearance of blood here is not an eſſential and inſeparable token of a peculiar ſpecies: one may then have a genuine dyſentery, without any blood appearing in the ſtools; and a dyſentery may be extremely dangerous, without any appearance of blood. The excrements in a dyſentery are likewiſe often only white, but frequent experience has convinced me, that they ſeldom remain of that colour during the whole courſe of the diſeaſe; and that theſe perfectly white

white excrements in a genuine dyſenteric caſe, are not accompanied by any one ſymptom, which may ſerve to diſtinguiſh it from a dyſentery attended by a putrid fever. Formerly the dyſentery without blood, or white dyſentery, as it was called, was looked upon as much more dangerous than what is termed a bloody flux, or red dyſentery; as to the former, they aſcribed a malignant nature, and conſidered the excrements in this ſpecies, rather as purulent, than mucous or watery; but I have ſhewn in the ſecond chapter of this work, that theſe purulent excrements are very often a mere chimera, and ſhall alſo ſhew in this chapter, that the appearance of danger in the dyſentery is taken from quite different tokens. The moſt important and dreadful dyſenteries were not, even in thoſe times, looked on as dyſenteries, if they were neither of the red nor white ſpecies; for the phyſicians, who publiſhed the Breſlaw obſervations, have put it as a matter of doubt, whether the painful diarrhœas, (as they call them) deſcribed by Willis and La Moniere, entirely without blood, ſhould be looked upon as real dyſenteries. This their doubt, ſeems to me to deſerve compaſſion. A great man in our art, Dr. Morgagni, teaches us, that whether a watery matter, howſoever coloured, or even pure mucous, come away from the patient,

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a great many phyſicians, after Willis's and Sydenham's example, have nevertheleſs, for a long time back, always called ſuch affection a dyſentery, if the ſtools were copious and very painful, though, at the ſame time, entirely without blood. This opinion, maintained by Dr. Morgagni is, in my judgment confirmed by the following conſiderations: firſt, as the dyſentery here in queſtion, obſerved by Willis in the year 1670 at London, brought the patients down ſo much within twelve hours, that they really ſeemed to be on the brink of death, and, indeed, actually died, if the phyſician did not haſte to aſſiſt them with corroborant remedies, and omit evacuations of all ſorts; and ſecondly, as ſuch a dyſentery has been obſerved to prove mortal on the thirteenth day, while neither blood nor pus came away from the patient, and even in the dead ſubject the inteſtines were found perfectly ſound. But an argument againſt theſe good gentlemen of Breſlaw, that comes nearer to the point, and thruſts ſtill more home, is this, that the dyſenteries deſcribed by Willis and La Moniere, evidently belong to the malignant ſpecies. All this, taken together, I give it as my opinion, that the various ſpecies of dyſentery are not to be diſtinguiſhed by the difference of the evacuated matter, but of the fever, by which they are accompanied.

But

But great phyſicians have likewiſe ſhewn, that there are many dyſenteries that do not come within the compaſs of a profeſſed treatiſe on the dyſentery, namely, ſuch as are only ſymptoms of another very different diſorder. After an inflammation of the ſtomach or bowels, ulcers, or even cancers, may be produced in them, the effect of which is a dyſentery of this kind. An abceſs in the liver yields a thin pus, mixed with blood and gall, that comes through the ductus choledochus into the inteſtines, and produces a ſpecies of dyſentery; acting in the ſame manner, as an ulcer in the pancreas, which pours through the pancreatic duct a purulent bloody matter into the inteſtines. A ſuppuration has been obſerved to ſpread (by means of blood-veſſels common to both) to the inteſtines from the meſentery, on which they are ſuſpended, when this latter has been inflamed and ſuppurated, or elſe it has affected them by metaſtaſis, and in both ways excited a very dangerous dyſentery. That painful kind of flux, called the hæmorrhoidal, which proceeds from the inferior part of the colon, or the ſuperior of the rectum, is often taken by ignorant people for a real dyſentery, as it has ſome reſemblance with it. All ſorts of corroding and irritating acrid matter, whether taken in at the mouth, as having its origin in the body itſelf, from corrupted humours

mours flowing into the inteſtines, produces a ſpecies of dyſentery. Bloody fluxes ariſe, as well as other hæmorrhages, after the amputation of any member. Sometimes a dyſentery is a ſymptom of an intermittent fever. There are petechial fevers, in which a genuine dyſentery is likewiſe a ſymptom at the beginning. It alſo very often terminates, or is a concomitant ſymptom of putrid and malignant fevers; but when a malignant fever ſupervenes on a dyſentery before ſubſiſting in the body, this is quite a different caſe, and conſtitutes a peculiar ſpecies of dyſentery. In military hoſpitals the dyſentery is complicated alſo with other diſorders, particularly with coughs and pneumonic affections, when the weather ſets in for cold. In the ſcurvy it is a very dangerous ſymptom.

However, we muſt diſtinguiſh from all theſe ſymptomatical ſpecies ſuch, as do not depend upon another diſorder, and of theſe only we here treat at preſent, and ſhall take four ſpecies into conſideration, though there are, perhaps, more; if there be, however, they are but ſeldom ſeen. The moſt uſual are, the ſpecies which accompanies an inflammatory fever; that which attends a bilious or putrid fever, the moſt common of any; that which is concomitant on

a malignant fever; and, laſtly, (if it may be admitted) the chronic dyſentery.

The dyſentery appears ſometimes with a regular inflammatory fever, a hard and full pulſe, a very violent head-ach, and a diſtended belly. An Engliſh phyſician, Dr. Akenſide, ſeems indeed not to believe the exiſtence of that ſpecies of dyſentery, which is attended with an inflammatory fever, affirming, that all fevers of this kind terminate in an inflammation of the bowels, which does not produce any diarrhœa in the leaſt. He adds alſo, that there are no other ulcers in the dyſentery, than thoſe that are the effects, and not the cauſes, of the malady; and on the ſtrength of this, he thinks he has a right to fall foul on Boerhaave, for not having attended ſufficiently at the bed-ſide of the ſick; but inſtead of that, confidently explained the cauſes of things from the chair to his diſciples. Dr. Akenſide is in the right in conſidering the ulcers of the inteſtines, that are remarked in the dyſentery, merely as an effect of the diſtemper; for if they were the cauſes of it, it would then belong to one of the ſymptomatic ſpecies before deſcribed. Dr. Akenſide would have been in the right if he had ſaid, that a common inflammation, or even ulcer, in any part of the bowels, does not produce a dyſentery;

tery; but when he denies, that an inflammatory ſtate of the blood, which has almoſt the ſame effect on the bowels, as an inflammation of the eyes has on the tunica albuginea, may produce an inflammatory dyſentery, he denies a thing which is demonſtrated, though ſeldom ſeen in London; and argues directly, as if one ſhould ſay, this man ſpits blood, and conſequently has no inflammation in the thorax. Dr. Akenſide is alſo in the wrong, in committing the very ſame fault himſelf, with which he ſo unjuſtly reproaches Boerhaave; for it is very certain that we may ſee, in the courſe of practice, real dyſenteries of an inflammatory ſpecies, which Dr. Akenſide did not ſee from his profeſſorial chair, and in which there cannot poſſibly be any conſtipation of the bowels, as the ſtools in thoſe caſes are at times uncommonly frequent, though accompanied with very little excrement. In September 1734, this ſpecies of dyſentery ſhewed itſelf in the village of Viterne in Lorrain; it came on with a breaking of wind upwards, and a very violent pain in the ſtomach and bowels; on this enſued a fever, and ſoon after frequent dyſenteric ſtools, with a teneſmus and unquenchable thirſt, and ſuch an inflammation from the œſophagus downwards to the anus, that the patients thought their inſides were on fire; the tongue near the œſophagus was

inflamed

inflamed and black: if the patient vomited in this condition, he died on a ſudden. In the ſpace of ten days, fifteen perſons died of this diſtemper, deſcribed by Dr. Marquet, dean of the college of phyſicians at Nancy. Some who were ſeen walking about the ſtreets at five o'clock in the afternoon, were ſeized with it, and died at ten o'clock at night.

I ſay nothing in this place of that ſpecies, which is attended with a putrid fever; as this is the very ſame ſpecies, on the ſubject of which we have given ſome hints in the firſt chapter of this work; for, ſtrictly ſpeaking, it would be improper to ſay that they are therein deſcribed. Perhaps many additions, taken from my later obſervations in the year 1766, and diſperſed up and down in this chapter, may fill up part of theſe chaſms, and are ſufficient for the end I propoſed, as the whole treatiſe itſelf is nothing but patch-work.

We do not give the title of malignant to, nor make a peculiar ſpecies of every dyſenteric caſe, in which ſymptoms of an alarming nature break out on a ſudden, where the beſt remedies, choſen with the greateſt judgment, have no effect, in which many of the ſick die, and a great number of theſe very faſt, and almoſt on a ſudden; and

where they die, as well with, as without the assistance of the physician. A dysentery of this kind may, notwithstanding all these circumstances, be of the inflammatory sort: it is, to be sure, extremely violent, dangerous, and alarming; but, strictly speaking, it ought not, even then, to be called malignant, as it is important to employ this word in a quite different sense. A philosophical physician entertains the more strict and determinate notion of malignity with respect to the dysentery, in case only, that with the causes common to that disorder at all times, and in all countries, others still are joined, which corrupt the humours very quickly: it is this circumstance, that impresses on a dysenteric complaint the peculiar mark of malignity, and then constitutes that peculiar species, which we are now about to treat of. The malignant dysentery is, therefore that, in which either from external causes, or from a putrid fomes within the body, a malignant fever supervenes. The pathognomonic signs of this species are formed by the symptoms of a malignant fever mixed with the usual symptoms of the dysentery with different degrees of force, and are chiefly alarming on account of their complication.

The most important symptoms of the malignant dysentery are, besides the usual shiverings,

(which,

(which, though not always preſent, often return in the courſe of the diſorder) a ſudden total loſs of ſtrength, and an extraordinary anxiety about the region of the pit of the ſtomach; this remains till the end of the diſorder, when it proves mortal, or till a remarkable change for the better, when the patient is deſtined to recover: it does not let him ſleep a moment, though otherwiſe he ſhews a good deal of inſenſibility with reſpect to every thing, and even to his own diſorder; for the moſt part his head is heavy and ſtupefied, but at times ſo intolerably painful, that his ſcull ſeems perfectly ſplit aſunder; he is often at the beginning of the diſeaſe in a calm delirium, which manifeſts itſelf particularly by an extraordinarily wild glance, a fixed exſtatic look, appearing in very deep thought, while, at the ſame time, he thinks on nothing at all. At times this delirium grows very high, the voice moſt commonly changes, and becomes weak; a ſlight impediment in the ſwallow is often obſerved juſt at the beginning of the diſorder, which is an extremely bad ſign. It happens very commonly, that the patient vomits worms, or that they are found in his excrements, or elſe that they creep up of themſelves into his palate and mouth, and ſometimes even into his noſtrils, ſo that he can pull them out with his fingers; but we muſt take care not to

conſider worms as a ſign of the malignant dyſentery, as they are ſeen in great quantity alſo in many epidemies of the bilious dyſentery: a copious vomiting of a perfectly green matter often appears, without any relief following from it; ſometimes too, the patient vomits blood, which is a very bad ſymptom. The pains in the bowels are not always proportioned to the danger of the diſorder: there are ſome who do not complain in the leaſt of them; with others they are extremely violent, and with others intolerable. Sometimes the belly remains ſoft, and ſometimes it is diſtended; the ſtools are ſometimes inconceivably copious, and this is ſo very dangerous a circumſtance, that the patient will appear in a dying condition in the ſpace of twelve hours, and often really dies in that time. Sometimes hardly any thing at all comes away from him; he has not the leaſt complaint, except a very troubleſome teneſmus, and dies in three or four days, if his ſtools cannot be rendered more liquid. The excrements are ſubject to great variations: ſometimes perfectly mucous, ſometimes of a dark brown, citron-yellow, or green colour; at times they conſiſt of mere water, and are at the ſame time amazingly copious; ſometimes entirely of thin watery blood. At this juncture, the patient is obſerved to grow worſe and worſe every hour, is light-headed,

ſeems

ſeems to ſuffer very little, and dies on the third day. Sometimes the excrements are of a greyiſh red; they are often black, though ſtill more commonly ſlimy, mixed with a ſubſtance that looks like chocolate and blood, and has always an extremely bad ſmell. Copious ſtools, with a low ſinking pulſe and increaſing delirium, are bad ſigns; on the other hand, it is a good token to have bilious ſtools followed by a ſweat: in ſlighter caſes, a ſweat often puts an end to the alvine flux, and the other ſymptoms almoſt on a ſudden; while, on the contrary, the entire abſence of this ſweat is dangerous. Heat of urine, and the ſtrangury, are ſtill more frequent than in the common bilious dyſentery: as theſe ſymptoms are in general obſerved directly at the beginning of malignant fevers, they are a bad omen in the malignant dyſentery, in which there is alſo ſometimes an entire ſtoppage of the urine. This fluid is ſometimes perfectly brown, a circumſtance which indicates death; ſometimes it is as clear as water, and ſometimes milky: the bad ſmell of the urine approaches ſometimes to that of the excrements. The ſame has been alſo obſerved in the breath, in the ſputa, and even in the ſweat. The patient's diſguſt for all kinds of food is unconquerable, and often, with the greateſt thirſt upon him, he cannot abide any drink, that is not cordial: ſometimes

the ſkin is extremely dry, and peels away in great pieces, or elſe it is conſtantly cold and clammy. In an epidemic diſorder of this ſort in France, it was remarked, that ſuch as had a great number of watery bladders break out on the whole ſurface of the ſkin, recovered: the ſame good effects were obſerved in Switzerland, when a miliary eruption appeared, and continued till the ſeventh day, if, at the ſame time, tumors appeared here and there on the ſkin, together with an eryſipelas. In other epidemies, juſt before the approach of death, petechiæ and large miliary puſtules have been obſerved to break out. The petechiæ ſhew themſelves very often on the fourth, fifth, ſixth, or ſeventh days, though they are not conſtantly connected with this kind of dyſentery: they appear moſtly on the breaſt, back, arms and legs; rarely, and almoſt never in the face. They are not to be reckoned in the number of mortal ſymptoms, but they help, with other ſymptoms, to increaſe the danger; and the deeper colour they are of, ſo much the worſe they are. I have ſeen them, in a caſe that proved mortal, of a brown, and even a bluiſh hue, in an inconceivable number all over the body: ſpots and puſtules have been likewiſe ſeen on the neck, under the arm-pits, loins, and about the groin, that were turgid with a green pus, and manifeſted

feſted a peſtilential nature. The only characteriſtic of the pulſe is, ſmallneſs; and it is very ſeldom that the reſpiration is not oppreſſed. Immediately at the beginning, a hiccough, an increaſing difficulty in ſwallowing, a diſtenſion of the belly, a perfect dryneſs and blackneſs of the tongue, faintings, ſometimes gangrenous ſpots on various parts of the body, and particularly on the legs and feet, denounce, for the moſt part, a near and inevitable death. However, in ſome inſtances, even a mortification, that has towards the end of the diſorder ſuddenly ſeized on the feet, has been found curable; and in others, common inflammatory tumors on the arms, as well as eriſipelatous eruptions, that came to a ſuppuration on the legs, have been obſerved to be critical, and eaſily healed; though, at the ſame time, the ſkin was covered with miliary and petechial exanthemata: the ceſſation of the patient's anxiety, the ſoftneſs of his belly, the free paſſage of his urine, the diminution of his weakneſs, and particularly the return of his natural ſleep, give certain aſſurances of a happy cure, which is often effected, to the great honour and triumph of our art; but alſo, full as often, cannot be brought about by the beſt phyſicians.

The ſlow, or chronic dyſentery, does not conſtitute a peculiar ſpecies, till the diſorder has

made ſome progreſs; for though one may even in the beginning, from ſome peculiar tokens, foreſee its long duration, it is not yet even then the queſtion, whether it ſhould be treated in the ſame manner as a chronic dyſentery: for ſuch a queſtion would be rather too ſimple.

We call a dyſentery ſlow or chronic; when three or four weeks are paſſed ſince the firſt attack, without our having any hopes of ſeeing the diſorder cured: it laſts very often many months, and ſometimes whole years; for at the very time, that I am writing this, an old man is come to me, that has had the dyſentery already two years together, with the uſual evacuations, and, notwithſtanding that, ſtill goes about, and does ſome work. This malady ariſes from an utter neglect of all remedies in the beginning of the diſtemper, as well as from leaving them off too ſoon; great errors in diet, a bad method of cure and frequent relapſes, and ſometimes becauſe, on account of the preceding bad condition of the bowels, the beſt remedies are without effect. In this ſpecies, the patient is very weary, his appetite very ſmall, and his indigeſtion ſo great, that not only a violent pain in the ſtomach enſues upon eating moſt kinds of food, but alſo his food comes away perfectly undigeſted, as in the lientery. The pulſe is very weak and

ſlow;

ſlow; but when there chance to be abſceſſes or ſuppurations in any part, it is quick. The ſtools are, to be ſure, not ſo copious as in the beginning of the illneſs, neither are they quite ſo painful, nor attended with ſuch frequent attacks of the belly-ach. The excrements are, in general, juſt as in the firſt period of the diſeaſe, ſometimes accompanied with blood, and ſometimes entirely free from it: nay, there is frequently, even for ſome years after, an appearance of blood in them, or even of genuine pus, when abſceſſes in the ſtomach or in the inteſtines chance to break, or when the patient has obſtinate ex-ulcerations in the bowels; and when there is an ulcer of this kind in thoſe parts, the excrements conſiſt of a thin, ſharp, fœtid, and cancerous matter. All theſe chronic caſes of the dyſentery are extremely obſtinate, and with many people mortal: they likewiſe terminate in other diſorders, and chiefly in the dropſy; and are never cured without extraordinary patience, obedience, and reſolution on the part of the patient.

After this ſhort view of the moſt uſual ſpecies of the dyſentery, it ſtill appears worth while to collect the moſt common ſymptoms (for, to be ſure, in this compendium, a great part of them muſt neceſſarily be omitted) belonging to all

all theſe different ſpecies, with their various changes and terminations; (though I do not intend to repeat what I have already in part treated of, eſpecially with regard to the malignant dyſentery.

An inflammatory dyſentery makes its appearance, at the beginning, with a very violent fever, a very hard pulſe, which, in other dyſenteries, is moſtly ſmall, and but ſeldom (and that only in the progreſs of the ſickneſs) becomes full; an almoſt continual and intolerable pain in the belly, which increaſes on the part's being touched, and ſtill more after vomiting; ſtools very inconſiderable with reſpect to quantity, a head-ach, red face, and ſometimes a diſtended abdomen. A putrid dyſentery diſcovers itſelf by a bitterneſs in the mouth, that appears directly on the firſt attack; a vomiting of a bilious matter, which is ſometimes alſo mingled with worms, a ſhivering that returns in the courſe of the diſorder, the ſometimes apparent ſlightneſs of the fever, the commonly pale colour of the countenance, the eaſe that is found after vomiting, the variegated colour of the excrements, and ſometimes by the worms contained in them. We may always ſuppoſe à priori the preſence of a malignant dyſentery; where many people, ſick of the dyſentery, are crouded together in a ſmall ſpace; but this diſorder

diſorder may likewiſe proceed from many other external, as well as internal, cauſes: its ſureſt pathognomonic ſigns are, the quick approach of a more than natural weakneſs, great anxiety about the pit of the ſtomach, a heavineſs in the head, a wild, and yet at the ſame time, a dead-like look, ſpirits extremely depreſſed, or a perfect indifference to every thing in the world, frequent ſlight convulſions, a very weak voice, a great many fainting fits, ſometimes a miliary eruption, petechiæ, aphthæ, a very weak pulſe, a vaſt ſickneſs at the ſtomach, and the other uſual ſymptoms in malignant fevers, which have been above related. The ſlow, or chronic dyſentery, is manifeſt enough of itſelf, and requires no deſcription.

A vomiting of a copious bilious matter, that comes on of itſelf in the beginning, is of ſervice in the putrid dyſentery; but one that returns very often in the courſe of the diſorder, and always enſues, whenever the patient takes any thing, even in the ſmalleſt quantity, is quite the contrary: the leaſt vomiting, even in the beginning of the diſorder, in an inflammatory dyſentery, is bad; a hiccough in the beginning is of very little conſequence, when it proceeds from indigeſtion, wind, or worms: but when the diſtemper is at its height, or has continued

any

any time, it is a token of an inflammation, and an approaching gangrene. It is a good ſign, when the patient ſhews an appetite; the want of it, with an increaſing diſguſt to food, is bad. Frequent ſtools, with a ſmall evacuation, is the uſual complaint; however, the diſorder is always worſe, the more frequent and ſmaller the ſtools are, and the more frequent and fruitleſs the teneſmus is in the firſt days of the illneſs. Large and few ſtools are good; large, very frequent, and ſuch as do not in the leaſt diminiſh the diſorder, are bad, and a token of a very powerful irritation in the bowels. Large ſtools, when the diſorder has continued any time, are bad, if, at the ſame time, the food comes away undigeſted, or if, without this circumſtance happening, they are only frequent. Streaks of blood ſhew a dilaceration of ſome ſmall veſſels in the rectum, which is of no conſequence; a great excretion of blood proceeds moſtly from the ſame part, or from the lower end of the colon, the evacuation of which is likewiſe, in other caſes, ſo very innocent. I ſaw, very lately, a great deal of blood come away in ſome dyſenteric complaints, that yet were otherwiſe, notwithſtanding the fever and the frequency of the ſtools, very tolerable, and almoſt entirely without pain. Hence it is, that ſo many obſervers have

found

found a large excretion of pure blood to be of no diſadvantage in the dyſentery, but rather of ſervice; while, on the other hand, many of their patients died in a ſhort time without the leaſt indication of blood in their excrements. Thoſe who loſt blood in great quantity, were, according to Degner's obſervations, always in leſs danger, than thoſe that had but little pure blood in their excrements, but, inſtead of that, a white, frothy, tough mucus only ſtreaked with blood; as theſe laſt complained of more violent pains, more frequent ſtools, and a greater loſs of ſtrength. A more intimate mixture of blood with the excrements, is looked on as a ſign, that the blood comes from a higher part than the rectum, and phyſicians are, upon that account, very much afraid of this token: without doubt, we may hence conclude, that the diſorder exerts itſelf chiefly in the inteſtina tenuia, where there muſt certainly be greater danger. In reality, I have ſeen this thorough mixture of blood with the excrements, in patients that were in extreme danger; but I have likewiſe ſeen it in very ſlight, and very eaſily curable caſes. Towards the approach of death, the ſtools became leſs bloody, that is, leſs red; for the blood is then changed into a putrid, ichorous matter: in general, the danger in this diſorder is not in proportion to the

the quantity of the evacuated blood; and it is only in the malignant ſpecies, that any loſs of blood whatſoever is, for the moſt part, extremely dangerous. With regard to the other ſigns taken from the excrements, there are very great errors committed, not ſo much on account of the pus being taken for a mucus, as by too liberally beſtowing the name of pus on mere mucus: in general, the more the colour of the ſtools departs from that, which is natural to them, the worſe they are; a green colour is a ſign of a perfectly vitiated gall, black is the worſt of all. The excrements have always a putrid ſmell; but when a gangrene ſupervenes, they prove perfectly cadaverous, though this may happen alſo juſt before, and at that time they are more infectious than at any other. Worms, which I ſaw in great plenty in the epidemy of 1766, in children as well as adults, make the dyſentery worſe, in the ſame manner as they do the putrid fever, and are ſometimes found in the excrements, and, at other times, brought away by vomits. They are, for the moſt part, of the round kind, though I have likewiſe ſeen in the epidemy of 1766, a perfectly aſtoniſhing quantity of aſcarides; but, according to Sir John Pringle's important admonitions, worms, in general, ſhould by no means be conſidered as the cauſe of this diſorder, but merely

merely as a token of the preceding bad condition of the inteſtines, of their tone being weakened, of a diminution of the natural ſecretions, and of a coagulation and corruption of the aliment. Aphthæ often come in the mouth and on the tongue ſuddenly, and are very dangerous, as well as a difficulty in ſwallowing; the belly-ach is always more dangerous, the more violent, and longer continued it is, and the leſs it ceaſes after evacuation. An ardent heat in the abdomen, a ſcalding in the urine, and even the ſtrangury itſelf, are in the bilious dyſentery only a ſign of an irritation from the gall, and are attended with no bad conſequence; in the malignant dyſentery, theſe ſymptoms are among the dangerous ones. An anxiety about the breaſt and pit of the ſtomach, are obſerved in divers ſpecies of this diſorder, and is always very dangerous: all hyſterical ſymptoms muſt be treated as ſuch, and therefore ſhould not be abſolutely conſidered as immediately proceeding from the diſorder; but all theſe ſymptoms are bad in a malignant dyſentery: real convulſions in a common dyſentery, after the uſe of aſtringents, are fatal with children. All nervous ſymptoms are dangerous in every ſpecies of this diſorder; as they are always a ſign of a very powerful irritation in the bowels, and ſometime kill them almoſt on a ſudden. Miliary,

or

or petechial eruptions, are moſtly dangerous; and though they are not reckoned among the abſolutely mortal ſymptoms, yet they help very much to increaſe the danger.

The diſtemper grows in general very dangerous, when either through neglect, or bad conduct, it laſts till the patient's ſtrength is quite gone, the inteſtines relaxed, and the tunica villoſa abraded; though there are ſtill hopes, as long as there are neither ſtools conſiſting of diluted blood, or coming away involuntarily, nor aphthæ, nor petechiæ, nor a hiccough, nor any complaints of a great weakneſs and anxiety about the præcordia; in which caſes, the beſt practitioners loſe all hopes. A complication of many dangerous tokens, is a ſure mark of approaching death, though many of them conſidered in themſelves, and ſingly, by no means denounce death; ſuch are faintings, hiccough, vomitings, particularly of an unuſual matter, heart-burn, anxiety about the præcordia, green ſtools, aſh-colour ſtools, or conſiſting of a dilute, watery blood, and not tinged with real blood; ſtools mixed with worms, and of an extremely cadaverous ſmell; a conſtant rejection of clyſters as ſoon as taken, extraordinary wakefulneſs, unquenchable thirſt, cold at the extremities, a perfect loſs of ſtrength,

a weak

a weak ſinking pulſe, a ſlight fever of the malignant kind, or elſe, to all appearance, an entire abſence of fever, an internal burning heat, cold ſweats, aphthæ in the mouth, which grow black, a difficulty in ſwallowing, a gangrenous ſore throat, perfectly brown ſputa, a ſudden ceſſation of all pain, retention of the urine, a deſire of getting up, a great inclination for cold water, livid lips, heavineſs in the head, a ſlight delirium, ſubſultus tendinum, convulſive motions of the whole body, the eyes ſunk in the head, a wild look, and involuntary ſtools. The event is always very dubious, when the violence of the diſorder has not been allayed by proper evacuations, as a gangrene very often ſlowly follows ſuch neglect; on the other hand, the happy termination of the diſorder depends on the ſpeedy uſe of the medicines appropriated to each ſpecies, and applied at a time when the patient's ſtrength is not as yet too much exhauſted, nor the inteſtines in the leaſt damaged. No illneſs is more ſubject to relapſe than the dyſentery, and frequent relapſes occaſion a continual diarrhœa, as they weaken the tone of the inteſtines, erode their tunica villoſa, and even occaſion ulcers in them. The ſigns of the diſtemper's having a happy exit, are the ceſſation of all the ſymptoms, that appeared at the beginning, with many other phænomena which,

a man with a very ſmall ſhare of judgment may eaſily perceive.

Theſe various circumſtances require various methods of cure. There are ſpecies of the dyſentery, in which remedies, that are found to be ſerviceable in a different ſpecies, prove fatal; and in which, on the other hand, thoſe that prove mortal in another ſpecies, are of the greateſt ſervice. There are even dyſenteries of the ſame ſpecies, in which the ſame method that was ſerviceable in caſes that ſeemed perfectly ſimilar, has a quite different and oppoſite effect. It muſt, therefore, be very ſenſeleſs to employ the ſame remedy in all caſes of the dyſentery: it muſt, therefore, be very ſenſeleſs to take it into one's head, that a ſpecific is to be had for all ſpecies of the dyſentery, or that ſuch ſpecifics are to be found in books, in which all the ſymptoms of the moſt different ſpecies are confounded together in the moſt indigeſted manner; and it is, therefore, in like manner impoſſible to determine on an univerſal method of cure for the various ſpecies and periods of this diſorder. But alſo after the moſt accurate diſtribution of its various ſpecies, and their different methods of cure, much ſtill remains here, as well as in the whole circle of medicine; the knowledge of which, though it cannot be tranſ-

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mitted by written precepts, is however of unſpeakable importance, namely, the manifold and almoſt innumerable complications of caſes, which are only determined by the particular circumſtances of the patient. But, when once informed of the nature and method of cure of each ſpecies, every phyſician muſt be in a condition to adviſe himſelf in the moſt complicated caſes; if he be poſſeſſed of that genius, which is beſt tried at the bed-ſide of the patient, and is of itſelf every thing in medicine.

In the inflammatory dyſentery, venæſection in the beginning is a principal article; and there is no occaſion to fear repeating it, if the patient has ſtill ſtrength, and is not too much exhauſted by copious ſtools: it has ſometimes an aſtoniſhing quick and good effect. After that ſhould be given, every day, three or four clyſters of barley-water, marſh and common mallows, and chamomile-flowers; but it is of great importance not to inject the whole clyſter at once, but at different injections, as it were, that it may ſtay the better, and not come away immediately without effect: internally, ſoft, emollient, and mucilaginous remedies are of uſe; gum arabic, pulvis è tragacantha according to the London Diſpenſatory, ſyrup of marſh-mallows, and, with theſe, the frequent uſe of

warm almond-emulſion, or barley-water. Warm fomentations of chamomile-flowers boiled in milk, are to be applied to the whole abdomen, after having rubbed it previouſly over and over with ointment of marſh-mallows. When the inflammation is perfectly cured, we may make uſe of the tincture of rhubarb with water, in ſmall doſes, going on at the ſame time with the almond-emulſion.

From a violent inflammation of the rectum, which very eaſily comes to a ſuppuration, the ſigns of which are obſerved in the patient's ſtools, an extremely troubleſome teneſmus may ariſe. This ſymptom is cured by venæſection, and often repeated clyſters, but eſpecially by leaches.

I have been of opinion, and probably moſt phyſicians in Europe, that all medicines, without any exception, are of no uſe; when an inflammation of the inteſtines is followed by a gangrene in thoſe parts, and that ſuch a gangrene was always abſolutely mortal; but I have ſince found the juice of lobſters in broths and clyſters, recommended in Mr. Rahn's famous work on the dyſentery, in caſes, that had all the tokens of an internal gangrene.

Emetics

Emetics are, in this ſpecies of the dyſentery, a deadly poiſon. Purges, by their irritation, do not do leſs miſchief, as they increaſe the inflammation. All opiates, heating, aſtringent and binding medicines, are here extremely hurtful. It is not uncommon for phyſicians of great reputation, after having found the true indication towards the cure of the diſtemper, to chuſe, for executing their purpoſe, remedies that have a quite oppoſite effect, or at leaſt appear to have it. The Breſlaw phyſicians laid it down as an indication towards curing the dyſentery, that the inflammation ſhould be reſolved; with this view, they adviſed radix tormentillæ, valerian, the confectio ex hyacintho, pulvis Hungaricus contra peſtem, and even nutmegs; that is to ſay, remedies that are aſtringent, conſtipating, heating, and conſequently increaſe the inflammation. Degner (with a view likewiſe to take away the ſlight inflammatory diatheſis remaining towards the end of the dyſentery) even adviſes the tincture of caſcarilla, which nobody will ever give as a good remedy, in a genuine inflammation of the inteſtines. He cites alſo others to prove, that the radix pimpinellæ albæ is of ſpecial uſe in the dyſentery, when the bowels are inflamed; though this root is acrid, hot, and irritating. Our excellent countryman, Mr. Rahn, in one part of his

work, cautions his readers very earneſtly againſt the uſe of anodynes and aſtringents, and in another place he adviſes, (to be ſure, for very weighty reaſons) even when an inflammation is to be apprehended, Sydenham's laudanum, the ſpecies ex hyacintho, and pillulæ ex cynogloſſo, that is to ſay, the very ſame remedies which he cautions his readers againſt. One great inconvenience in the adminiſtration of opium is particularly this, that during the uſe of it, the inflammation gets to a head, without either the patient or phyſician knowing any thing of the matter.

The ſaccharum ſaturni is of ſervice in external inflammations; Rivinus and Dolæus have therefore made trial of it in inflammatory dyſenteries, and thought it had a good effect. Now the ſaccharum ſaturni is, in general, a medicine, whoſe bad qualities have rendered it juſtly formidable, but whoſe ſalutary properties (notwithſtanding Mr. Goulard's experiments) are not yet ſufficiently known, and it promiſes not a little to phyſicians of genius, who intend to make trial of it; as we may learn from the important obſervations of Dr. Hoze, a Swiſs phyſician of extraordinary ingenuity, experience and merit. It cannot, however, be admitted in the dyſentery, as it confines in the

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ſtools and increaſes the pain, and conſequently the inflammation.

Nothing can be more murderous, than the method which Marquet adviſed in the above-deſcribed inflammatory dyſentery, obſerved at Lorrain. He forbad veneſection, and preſcribed ipecacuanha, rhubarb, diaſcordium, and a decoction chiefly conſiſting of aſtringents. If theſe counſels were of ſervice, the dean of Nancy's deſcription of that epidemy is fictitious; if, like the plague, they occaſioned vaſt ravages, and death, they did nothing but what might be expected from them.

In the bilious, or, as it is called, putrid dyſentery, the method may be purſued, which I have deſcribed in the firſt chapters of this work from my own experience, and towards confirming which, ſomething more may here be added; but alſo a great deal more may be done, or let alone, which I have not hitherto been able to ſpeak of, and muſt, therefore, make amends for it at preſent. To all this I ſhall add various obſervations made in the epidemy of 1766, and relate them always with ſincerity; though they ſhould hurt my reputation, by ſhewing when I have been unfortunate; for a medical book is not worth taking

into one's hand, if the author does not ſhew a moſt ſuperſtitious regard to truth.

Sydenham and Huxham have ordered venæſection in general, at the beginning of the diſorder. Monro found it, in the Engliſh army in Germany, during the laſt war, extremely neceſſary in recent caſes, and of very great uſe in alleviating and curing the diſorder: but when the diſtemper had laſted ſome time, and began already to grow tedious; when the fever was off, and the patient very weak, he looked upon it as unneceſſary, and even thought it did harm. Pringle, indeed, lays it down as a maxim, that the dyſentery of itſelf does not ſtand in need of venæſection; but that when it is accompanied either with a plethora or inflammatory ſymptoms, he then looks upon blood-letting as often indiſpenſible, and always of ſervice towards the cure: yet, when the firſt-drawn blood has no tokens of an inflammatory diatheſis, and the fever is not ſuſtained by an extraordinary inflammation, he then finds it either unneceſſary or hurtful to repeat it, as the patient's ſtrength muſt be kept up in ſo debilitating and putrid a diſorder; but all this is manifeſtly meant in thoſe caſes, in which an inflammation is joined to the putrid nature of the diſorder, and ſo far I am perfectly of the

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ſame opinion with theſe great Engliſh phyſicians.

Now, inflammation and putridity, or, (if you will) a bilious degeneration of the fluids, are not always found together: it is, therefore, worth while to hear the Dutch and German phyſicians on the excellence of their method. Degner ſays, that in conſequence of Sydenham's having called the dyſentery a fever turned inwards on the bowels, he adviſed blood-letting, in order to drive away from thoſe parts this afflux of acrid humours; but if the dyſentery muſt be called a fever, it naturally merits the name of a ſh—— fever; as it expels, through the poſteriors, the whole ſubſtance of the body. In the dyſentery of Nimeguen, venæſection was not neceſſary; accordingly, Degner did not adviſe any body to it; as it does not correct the bile, but rather weakens the vis vitæ, and diſturbs nature in her ſalutary motions: accordingly he likewiſe ſaw venæſection followed by vomiting of blood, and death. On theſe, and other conſiderations, venæſection appears to be very much ſuſpected by Dr. Degner: as nature does not eaſily bear two ſuch evacuations at once; and as taking all things together, it is very little ſerviceable: he found it rather more ſo in plethoric perſons,

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by way of preſervative; and yet ſeems to think, that in all caſes one muſt proceed in it with great judgment and penetration, or, otherwiſe, one runs the riſk of doing more harm than good. Eller ſays, we ſhould in the beginning, and the firſt period of the dyſentery, examine whether the patient be plethoric, and have a quick and full pulſe: in this caſe, we may take away ſome blood, as it ſeems to be in a ſtate of inflammation, and even repeat this evacuation, if the blood be covered with a yellow cruſt, which happens, however, extremely ſeldom; but when there are no ſigns of a plethora, the letting of blood is not only ſuperfluous, but alſo pernicious, as it takes away the patient's ſtrength, ſo neceſſary to overcome the diſtemper, of which he has, at the ſame time, manifeſtly very little to ſpare. I conclude then from all this, that venæſection may, and ſhould be omitted in a dyſentery, that is merely attended with a bilious fever alone; but that there is likewiſe not the leaſt reaſon to blame the phyſicians, that make uſe of it in complicated caſes.

Emetics, like purgatives, have been formerly either entirely neglected in the dyſentery, or elſe too ſparingly made uſe of; and, nevertheleſs, later experiments ſhew, according to

Dr.

Dr. Pringle's opinion, that they conſtitute the chief part of the cure. Eller ſays, he has found, (and it is confirmed by the long experience of phyſicians) that no evacuation conduces more towards the cure of an epidemic dyſentery, than thoſe that are cured by emetics. A dreadful dyſentery raged in Auguſt 1721, in different parts of Upper Saxony. Eller was called in it, and ſoon found, that no medicines were ſo effectual in the beginning of the diſorder, as thoſe that at repeated times thoroughly expelled the irritating bilious matter; ſo that by his indefatigable pains he cured his patients moſt commonly within a fortnight or three weeks, merely by evacuations, and even cured relapſes in the ſame manner. Out of three hundred ſick, which he had in his care, he loſt ſcarce one man in forty.

It has been obſerved, that emetics, with reſpect to the evacuation of the bile, are more effectual, and that they have the beſt ſucceſs, when they work likewiſe by ſtool. Both theſe effects were obtained with more certainty by Dr. Pringle in the Engliſh army, when he gave, inſtead of the uſual quantity, only five grains of ipecacuanha at once, and repeated it two or three times the ſame day, till a vomiting or purging enſued, which generally happened either

ther before, or juſt after the third doſe. Fifteen grains, adminiſtered in this manner, procured a larger evacuation, than thirty grains given at once: however, though the Doctor found this manner of ordering the ipecacuanha very uſeful, eſpecially when it is repeated once, or oftener, after having been omitted a day or two; he left it off, on account of the extraordinary ſickneſs of ſtomach that followed upon it; though he imagined it to be the ſureſt method of cure. Dr. Eller made uſe of this method ſo long ago as the year 1721; ſo that he gave twice, thrice, or even four times a day, four, five, or ſix grains of ipecacuanha, till a gentle vomiting enſued: for ſtrong people, he mixed with each drachm of ipecacuanha four grains of emetic tartar, and of this compoſition he preſcribed four, five, or ſix grains, to be taken in the ſame manner at different times, with the beſt ſucceſs. Dr. Monro ſaw in the Engliſh army, when in Germany, that repeated ſmall doſes of this root, from four to ſix grains, occaſioned vomiting and purging; but, at the ſame time, ſuch an intolerable ſickneſs, that it was impoſſible for him to bring the ſoldiers to undergo this treatment. Dr. Francis Ruſſel found, in the year 1756, that a few grains of rhubarb mixed with each doſe of ipecacuanha, made it operate rather as a purgative; while, at the

the ſame time, his patients were not ſo ſick with it. Dr. Akenſide gave only one or two grains of the root every ſix hours, but took care to mix it with a julep, compoſed of mint-water and confectio cardiaca; and excepting breathing a vein and giving a vomit, he ſeems to truſt to this medicine alone for the cure of the dyſentery.

I have myſelf, likewiſe, made trial of this method of giving ipecauanha in ſmall doſes, in the epidemy of 1766, with many of my patients. I gave it to children at four times, at each time five grains, with the ſame quantity of cremor tartari; to adults at three times, at each time ten grains, with half a drachm of cremor tartari, or elſe at four times, each time ten grains, with the ſame quantity of the ſaid ſalt. The vaſt ſickneſs at the ſtomach, taken notice of frequently by ſo many writers, and formerly by myſelf in two inſtances, I did not now obſerve; but neither did I find, that theſe repeated doſes procured the deſired evacuations better, than if I had given the whole at once: and many times no vomiting at all enſued on the firſt or ſecond doſe; while, at the ſame time, there was a great deal of pituitous matter in the ſtomach; and it was only in exciting a greater evacuation by

by ſtool, that theſe ſmall doſes ſeemed to be of any uſe.

Perhaps, however, no method is better than that, which Dr. Tiſſot has given us in the putrid fever, and which conſiſts in diſſolving a pretty good portion of emetic tartar in a great deal of water, making it palatable with ſyrups, and drinking as much of it as is ſufficient to excite repeated vomitings. That very ingenious Engliſh ſurgeon, Dr. William Ruſſel, found, during the attack of Martinico by the Engliſh troops, that the tartar emetic was the beſt and chief vomit in all caſes of the dyſentery, where there is much putrid bile in the ſtomach and bowels, as it quickly evacuates the corrupted matter, which otherwiſe did the patients in that hoſpital the greateſt harm, if it remained only for a ſhort time in the inteſtines. Dr. Pringle thinks it always ſerviceable, to mix a grain or two of emetic tartar with a ſcruple of ipecacuanha, by which means, without in the leaſt diminiſhing the peculiar virtues of the root, the medicine becomes more purgative, and more effectual in evacuating the gall. This mixture may, therefore, be made uſe of in the beginning of the dyſentery, by thoſe, who do not chuſe to order the emetic tartar alone.

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The ſtimulus of the emetic tartar is ſo much the more neceſſary to be added to the ipecacuanha; as this laſt has ſometimes, even in large doſes, no effect upon ſtomachs, that are not ſufficiently irritable, or loaded with too great a quantity of mucus; while, at the ſame time, it operates very well, even in ſmall doſes, in oppoſite circumſtances. I was called, during the epidemy at Brugg, in the year 1766, to a child of twelve years, that had had the dyſentery three days, with a very bitter taſte in the mouth, a vaſt oppreſſion on the ſtomach, violent gripings, and a high fever: I ordered him for that night, half an ounce of cremor tartari, and for the following day, thirty grains of ipecacuanha for a vomit; it did not excite any vomiting, but, on the other hand, evacuated by ſtool a great deal of an intolerably fœtid matter, with much relief to the patient: in the evening, and during the whole night, I gave him ſtill more of the cremor tartari, and the next morning four ounces of tamarinds to procure an evacuation, which they did not immediately produce; but at firſt occaſioned a prodigious vomiting of a very copious, tough mucus; however, at laſt they purged him pretty ſmartly, and the oppreſſion on the breaſt and the pains in the belly, vaniſhed together with the fever: the cream of tartar completed the cure. In this caſe I ought, without

doubt,

doubt, to have given the tartar emetic either alone, or with the ipecacuanha.

The repetition of the emetic is, in certain cafes, of no fmall importance. In very obftinate ones, Dr. Monro faw emetics, properly adminiftered, extremely conducive towards the cure; and many phyficians rely on ipecacuanha alone for the cure of this diforder. In the epidemy of 1766, I remarked, that partly on account of heating remedies having been taken at the beginning, partly on account of the prefence of a great quantity of bilious and mucous matter, and partly by reafon of the patient's being peftered with worms, which crept up out of their ftomachs, all the medicines they took were rendered ufelefs, by a continual inclination to vomit, and frequently by abfolute vomitings, in fpite of the emetics, that were given them for many days together. In thefe circumftances, I ordered very often the tincture of rhubarb made with water, which, for the moft part, ftaid on their ftomachs, and at length (though after fome time) brought the diftemper happily to an end; but in vehement, dangerous, and urgent cafes, in which there was no inflammation, I gave a fecond vomit. A man of thirty-four years, at Brugg, was violently feized with the dyfentery: the firft day, fomebody prefcribed

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him a vomit, and in the evening ſome cream of tartar. I was then called, and gave him, the ſecond day, tamarinds in the morning, and during the night, cream of tartar with chamomile-tea; the third day, manna with ſal catharticum amarum, and in the night, at proper intervals, tamarinds; he caſt all theſe remedies up again, and with them an aſtoniſhing quantity of bilious matter; his ſtools were at the ſame time extremely frequent, but very ſmall in quantity, perfectly bilious, and mixed with a great deal of blood: as well after, as before the ſtools, he had continual gripings, and his fever daily increaſed, after having been almoſt imperceptible in the beginning. Early on the fourth day I was told, that I ſhould not be able to give him any more medicines, as the whole preceding night, and that morning, he had again brought up a vaſt quantity of bilious matter, and as to the reſt, found himſelf in the ſame miſerable condition as before. This induced me to try the ipecacuanha; my patient took it willingly, and ſoon after vomited a very great quantity of bilious and mucous matter, together with a large worm: immediately on that, I gave a purge of manna and ſal catharticum amarum; he did not bring it up again, but had from it twelve large and copious ſtools; the reſult of which was, that his pains diminiſhed at each ſtool, and, at

length entirely ceased, without returning any more. The remainder of the history of this remarkable case I intend to relate, when we come upon the article of the regimen of the mind.

The purge may be given a couple of hours after the first emetic, or the morning following its exhibition; but the use of purges, and the time when it is proper to repeat them, must be regulated according to the influence they have on the pains. On this article I have again the assistance of two of the greatest physicians in England: his Britannic Majesty's physician in ordinary, Dr. Pringle; and Dr. Monro, formerly physician to the English army in Germany, and now physician to St. George's hospital in London: they have both seen the same things, as I have, and have both drawn from what they have seen the same conclusions, as I. According to Dr. Pringle's opinion, whether the emetic be repeated or no, the purge must, at all events, always be given the next day, or the day after; and after that, as often as is consistent with the patient's strength, or the obstinacy of the fever requires. However, the necessity for continuing the purges, is rather determined by the pertinacity of the gripings and bearing down, than by the blood, that appears in the stools; and Dr. Pringle thinks it impossible

ſible to effect a cure, without copious evacuations of this kind. He admoniſhes us, therefore, not ſo much to attend to the doſe, as to the effects, which are not to be judged of by the number, but by the largeneſs of the ſtools, and the relief which the patient finds with regard to the gripings and teneſmus after the operation; for the ſtools are commonly more frequent from the diſorder alone, than from the purges exhibited. In like manner, my friend Monro found, that a great part of the cure depended on the frequent repetition of the gentle purges he gave in the beginning, which are capable of evacuating the corrupted matter: he gave purges of this kind to the ſoldiers of the Engliſh army in Germany every ſecond, third, or fourth day, according as the caſe required; for the effect of the firſt purge, and the ſymptoms that appeared after its exhibition, determined the number of times it ought to be repeated. Dr. Monro was aſtoniſhed at the little loſs of ſtrength, which his patients ſuffered on being ſo frequently purged: he gave ſtrong people theſe purges, ſometimes two, three, or four days, one after another; and obſerved, that the patient, inſtead of being weak upon it, appeared ſtronger, chearfuller, and briſker, from the relief, that enſued at the end of the operation of each purge; as his corrupt, putrid hu-

mours, were now evacuated, that as long as they remained in the inteſtines, kept up in him a conſtant ſickneſs and nauſea. From theſe experiments, ſo very like my own, the truth of this great medical maxim appears, with reſpect to purges in the putrid dyſentery; that in it, no other medicines ſtrengthen the patient, than ſuch as diminiſh his diſorder; and that he is very often ſtrengthened moſt, when he thinks he is moſt debilitated.

By the ſpeedineſs of this method, in evacuating the corrupt, bilious matter, one may cut off the diſorder at the root, if there be not invincible obſtacles in the way; while, on the contrary, by neglecting this method, it will, at leaſt, be very tedious. In the epidemy in 1766, I ſaw many perſons cured in two or three days by evacuations, made immediately at the firſt attack of the diſorder, and ſufficiently repeated; though they had all the tokens of a real dyſentery; a violent and long-continued cold fit, vaſt ſickneſs, an inclination to vomit, bitterneſs in the mouth, heat, head-ach, great pains about the ſpine of the back, gripings in the belly, and a looſeneſs, with a very ſmall quantity of excrement. A woman of thirty-nine years, at Brugg, found herſelf preciſely in this condition: I gave her, on the firſt attack, in the evening,

evening, four drachms of cremor tartari; this occaſioned four large ſtools in the night-time: the next morning I gave her three ounces of tamarinds; upon this followed a great number of large ſtools, to the great eaſe of the patient, and the fever went off: I gave her, for that night, an ounce of cremor tartari, to be mixed with two quarts of barley-water; and on the third day, two ounces of manna with ſix drachms of the Sedliz purging ſalts, which the ſame day put an end to the diſorder. I have ſeen not a few examples of this kind: ſometimes the attacks were ſmarter, and were nevertheleſs pretty quickly cured by the very ſame method. A young woman of twenty-three years of age, at Brugg, had, during the epidemy of 1766, very violent gripings for a whole week together: and at length a confirmed and extremely painful dyſentery, with ſuch a fever as I never yet ſaw at the firſt attack; a fire-red face, a ſtrong pulſe, profuſe ſweats, an extreme bitterneſs in the mouth, and a conſtant inclination to vomit: I gave her, at five o'clock in the evening, a vomit compoſed of forty grains of ipecacuanha, and twenty of cremor tartari; and two hours after, a drachm of the ſame ſalt, with a drachm of rhubarb: and it was aſtoniſhing, how much bilious matter was evacuated upwards and downwards with relief to the patient.

The ſecond day, I gave her an ounce and a half of the Sedliz purging ſalts early in the morning: the evacuation was copious, and the matter evacuated red and green; her pains were much relieved about noon, the fever at the ſame pitch, but the heat was, however, leſs. On the third day, I gave her again an ounce and a half of Sedliz ſalts early in the morning; this occaſioned half an hour afterwards a copious vomiting of bile, notwithſtanding which, enſued a violent purging: twelve hours after that, all her pains vaniſhed, and at four o'clock in the evening I did not obſerve ſhe had any more fever; towards night her pain came on again, I gave half an ounce of cream of tartar with a quantity of barley-water, to be drank by degrees in the night-time; this occaſioned many more ſtools, and her pain went off. The fourth day I found my patient in a very good condition, and preſcribed her the tincture of rhubarb; in the evening ſhe had ſome pain, and a bitterneſs in her mouth; I ordered her ſome cremor tartari for the night. The fifth day the girl found herſelf perfectly well, voided a worm, had no ſtools the whole day throughout, and got quite well. But when the beſt remedies, exhibited to evacuate the bilious matter in this ſpecies of dyſentery, do not perform their office; the ſame thing happens, as is obſerved in the uſe

of

of their oppoſites, namely, aſtringent and conſtipating medicines. In the epidemy of 1766, at Brugg, a child of ſix years, naturally bound in his body, was ſeized with a dyſentery; the bilious matter it caſt up the firſt and ſecond day in great quantities, convinced me, that this caſe was of the bilious kind; the ſoftneſs of the pulſe, and the pains being ſo tolerable through the whole courſe of the diſorder, as never even to make the child cry, was a proof to me of the abſence of inflammation; the child had ſtools without number night and day, but not one good; and the dyſenteric matter remained ſo pertinaciouſly in his body, that I made uſe of ipecacuanha, manna with a ſmall quantity of cremor tartari, tamarinds, and tincture of rhubarb in the quantity it is uſually given to children of that age, without any effect: for on the fourth night he became perfectly light-headed, voided a worm, and had many convulſive twitchings. I ſaw him early the next morning, when he was quite out of his ſenſes; his eyes were perfectly convulſed; he toſſed and tumbled about in his bed; I felt the cold hand of death upon him, and accordingly he died the ſame day; thus giving me a proof, that a child may very quickly die even of the bilious dyſentery, without a violent pain in the bowels preceding, a hard pulſe or diſtended belly, and conſequently without any preced-

ing inflammation, when a copious bilious matter, that ſtimulates the bowels to deadly convulſions, remains in the body. In fine, during the above-mentioned epidemy, I ſaw in the moſt deciſive manner, in the caſe of a reverend clergyman, how much the invincible inclination for ſtrengthening and heating remedies, and (which is the conſequence of it) an averſion for every thing that evacuates, increaſes the diſorder, and makes it more ſerious and dangerous in all reſpects; ſo that even ſo late as towards the end of it, tumours appear on the legs, and the completion of the cure is prolonged above five weeks; ſuppoſing one can force as many evacuating remedies on the patient, as is juſt ſufficient to ſave him from impending death.

With regard to the choice, that ought to be made of the purges fit to evacuate ſpeedily the bilious matter, Dr. Monro, Dr. Brockleſby, and Dr. Ruſſel have made various experiments, which agree with mine. The purge which Dr. Monro chiefly made uſe of for his firſt patients, was rhubarb; but after repeated trials he found, in the ſame manner as Dr. Brockleſby, that in general, rhubarb during the firſt period of the diſeaſe, was not ſo good as the ſal catharticum amarum with manna and oil, which operated without pain or anxiety, evacuated much bet-

ter, and gave more relief, than any other purge made uſe of in the Engliſh army. According to my lateſt experiments, all this is perfectly true; I gave in the epidemy of 1766, manna and Sedliz ſalts together in a draught, with much better ſucceſs than tamarinds, but left the oil out. Dr. Monro preſcribed likewiſe at Bremen, the tincture of rhubarb made with water, and found it an eaſy purge, but not ſo well coinciding with his views in recent diſorders, as the ſalts and manna. This is alſo perfectly juſt; but yet I ſaw in the ſame epidemy ſome caſes, in which tamarinds, manna, and ſalts, would not keep on the patient's ſtomach; ſo that in theſe caſes, the tincture of rhubarb given in great quantities had ſomething very excellent in it, as the ſtomach bears it very well, as it often takes off the vomiting, and, as it at laſt puts an end to the diſorder, though not ſo ſoon as the tamarinds, manna and ſalts; nay it ſometimes even puts the ſtomach in a condition to bear the above-mentioned remedies. However, after all, theſe laſt are moſt ſpeedy in the cure; the caſe muſt be then, that children have mach acidity in their primæ viæ, and eſpecially in their ſtomach, which is a great obſtacle to the purging quality of the tamarinds and cremor tartari, and on that account theſe medicines are very often of no uſe at all to children. Dr.

Francis

Francis Ruffel saw at Gibraltar, in the year 1756, a rife and mortal dysentery; after having made trial of a great number of remedies, he found that nothing gave greater relief or more forwarded the cure, than repeated doses of the sal catharticum amarum. I have also made use of this salt with benefit.

It has nevertheless been always thought that salts, and even acids of all kinds abraded the intestines. It is true, that all rough and irritating remedies should be avoided in this disorder; but the point is to know rightly, what medicines have this effect in the bilious dysentery, for in this very point many physicians have been deceived. Zacutus the Portuguese, indeed, was not afraid of arsenic in the dysentery; but his countryman Amatus condemns even tamarinds, on account of their stimulating acidity. Degner says that all salts, for example, tartarus vitriolatus, arcanum duplicatum, sal polychrest, sal prunellæ, and others, are often prescribed by physicians, absolutely in opposition to all the dictates of common sense and medical prudence; as by their corroding properties they only excite more violent pain and irritation in the ulcerated bowels: he did not therefore even think nitre safe, in the height, and during the progress of the disorder; as it increases the

diarrhœa.

diarrhœa. Now it appears to me, that Dr. Degner has here drawn concluſions without ſufficient foundation. For firſt, it is falſe that the inteſtines are ulcerated in the dyſentery, ſo often as is in general believed; and where they ſhould chance to be inflamed, or even abſolutely ulcerated, no phyſician of any ſenſe would be ventureſome enough to preſcribe a ſalt: in the ſecond place, it anſwers preciſely the phyſician's intention, when by means of a ſalt properly choſen the flux is increaſed, as long as there is any corrupt bilious matter to evacuate. However, Dr. Degner was not utterly ignorant of the ſalutary influence of acids in general; for he gives whey great encomiums, and even commends the copious uſe of lemon-juice, which he did not find ſtimulating; and is very fond of Moſelle and Rheniſh wines, purely on account of their acidity. Had this famous burgh-maſter of Nimeguen, properly diſtinguiſhed the bilious dyſentery from the malignant, he would not perhaps have rejected in the bilious dyſentery, what he undoubtedly found hurtful in the malignant.

With regard to the uſe of acids in the dyſentery, the force of truth, even in former times, broke now and then through the clouds of prejudice. Dolæus, a writer of experience, that

according

according to the error of the age he lived in, aſcribed the cauſe of the dyſentery to an acid, had, however, ſincerity enough to recommend ſtrongly a mixture of lemon-juice and oil, and confeſſes, that he had cured with this medicine above a hundred people of the dyſentery. Riverius, in all fluxes that proceeded from a putridity of the juices, ordered biſcuits to be repeatedly dipped in vinegar, then to be dried, rubbed to powder, and a ſoup to be made of them. Among the modern phyſicians the famous La Mettrie, with others, found vinegar, lemonade, and whey, of great ſervice in the common putrid dyſentery, as well as that the dread of fruit was without any grounds. Perhaps I have made more uſe of acid ſalts in the dyſentery, than any other phyſician; for Dr. Tiſſot does not order, as it is inſerted in the German tranſlation of his Advice to the People by an error of the preſs, an ounce of cremor tartari, to be taken with two quarts of barley-water, but only two drachms; though at preſent he gives even an ounce at two or three times in a very little while. By this procedure I found, that the oppoſition of phyſicians (at leaſt to acid ſalts) in the ſpecies of dyſentery here treated of, comes entirely from prejudice.

Syden-

Sydenham has in the ſtrongeſt manner recommended by his authority, opium and its preparations in the dyſentery; though many objections have been made ſince thoſe times againſt them, objections, that are certainly neither diminiſhed in number, nor otherwiſe weakened by my experiments. I will not tire my reader with repeating them, but recommend to him the cautionary rules, that may be drawn from them, and which, when we make uſe of opium and other things of that ſort, ſhould always be preſent before our eyes. Alexander Tralles looks upon the conduct of thoſe, that in the dyſentery, immediately pour a great quantity of opium into the body, as raſh, and without judgment; and Freind remarks upon this place, that theſe remedies do indeed for a time put a ſtop to the alvine flux, but after that only increaſe it, and beſides this, attack the head, and weaken the patient; upon which account Alexander is of opinion, that opium ſhould be only uſed on the moſt extreme neceſſity in this diſorder. Soporifics and opiates were very much ſuſpected by Degner in this diſorder; as in his opinion, it is neceſſary to be particularly attentive to the patient during their uſe; and as they muſt never be preſcribed without great caution, and even then not in the daytime; that by their obſcuring and torpifying the

the ſenſes and vis vitæ, the malady may not lie concealed, and thus have an opportunity to increaſe, and make greater devaſtations. Pringle ſays, that all preparations of opium and aſtringent medicines, are of ſervice for a ſhort time only, and make the diſorder towards the end more dangerous than before; it would be therefore better, that opiates were not given at all, till the primæ viæ were cleared; for though they at firſt give ſome relief, yet by confining the wind and the corrupted humours, they tend to fix the cauſe of the diſtemper; whence it is, that the premature uſe of opium in the dyſentery ſometimes occaſions a real tympany. This fixing of the morbific cauſe by means of opium, Dr. Pringle has proved by repeated experiments; though Sydenham does not ſeem to apprehend much danger in it. To be ſure he did not omit to purge his patients when the dyſentery was moſt epidemic; but at all other times he ſeems to have truſted to laudanum alone. But whatever was the nature of theſe fluxes, Pringle was very ſure that ſuch as are moſt incident to an army, are not of ſo mild a nature, and can never be cured without evacuations; the beſt rule therefore that this excellent phyſician can give, is to defer the adminiſtration of opium, till the patient has undergone ſufficient evacuations, and then if it be ſtill neceſſary, to begin with ſmall doſes.

doſes. But when opium given with theſe cautions does not procure any eaſe, Dr. Pringle with the greateſt reaſon looks on it as a token, that ſome corrupt humours ſtill remain in the inteſtines, and that it would be of more ſervice to go on with the evacuations, than to ſtop the flux.

Phyſicians of equal authority are of the ſame opinion with regard to opium. Eller has in like manner found, that notwithſtanding the ſhort relief perceived on the uſe of this medicine, the pain attacks the patient afterwards with new force; and that from its property of diminiſhing the tenſion of the fibres in the inteſtines, the expulſion and evacuation of the acrimony adhering to them, would be put a ſtop to; and thus the diſeaſe, that we are ſtriving to get the better of by means of opium, is increaſed. Notwithſtanding this, Eller gave ſome ſlight preparation of this remedy, but not before he had very much diminiſhed and nearly put an end to the pains, and had evacuated the greateſt part of the dyſenteric matter; he had however immediate recourſe again to a purge, and repeated it, as often as the tormina returned, and conſequently as often as there were any ſigns of acrimony being collected afreſh; ſhewing by this procedure, how very differently a

phyſician,

phyſician ſhould conduct himſelf in the various periods of this alarming diſorder. Dr. Young in Scotland, who has written excellently well on the virtues of opium, gave it in the dyſentery, only when the diſorder was very mild, or when its violence had already remitted by the means of evacuants and emollients. Dr. Baker in England, found opium not adviſeable in this diſorder, till the excrements were pretty nearly of their natural conſiſtence. My friend Monro found in the Engliſh army in Germany, that diaſcordium, philonium, and other remedies of this kind, put too great a ſtop to the alvine flux, occaſioned a violent cholic, and increaſed the fever; he therefore made uſe of them very ſeldom in the firſt period of the diſtemper; he gave however an opiate at night, when he had purged the patient in the day-time, and even repeated it every night, though he had not purged him the ſame day; but found himſelf obliged to uſe a great deal of circumſpection with regard to the doſe, as long as the diſtemper remained at its height; he gave his medicines too only in a quantity ſufficient to alleviate the pain, and procure ſome reſt, but never enough to ſtupify the patient, or ſtop the alvine flux, while it kept within proper limits. All theſe prudential rules coincide with thoſe, I have learned from my own experience.

Next to opiates, Dr. Pringle, as well as myſelf, found nothing better for alleviating the pain, than fomentations of the abdomen and drinking chamomile-tea; the latter is alſo uſeful on account of its antiſeptic quality. During the epidemy of 1766, I ſaw likewiſe at times in difficult caſes, the gripings and even the teneſmus happily quieted by drinking plentifully of almond-emulſion, and ſleep promoted by the ſame means. When the pains of the abdomen were too much fixed to ceaſe on the application of fomentations or demulcents, Dr. Pringle applied with great ſucceſs a bliſter-plaiſter to the part affected. Dr. Eller found a thick gruel made of barley, oatmeal, or rice mixed with a good deal of oil in a clyſter, very ſerviceable in a violent bearing down of the anus; but I have likewiſe found remedies of this kind uſeleſs, and have therefore conſidered the real nature of this teneſmus, ſelected other medicines for it, and obtained my end in the year 1765, in the manner I have related in the fourth chapter. In the year 1766, proceeding on the ſame principle in a very obſtinate caſe, (in which however the patient had undergone a great many evacuations, as well at the beginning as during the courſe of his illneſs) I firſt gave tamarinds for a violent teneſmus, that drove the patient to

the heighth of deſpair, and afterwards the tincture of rhubarb in great plenty, with a good many clyſters of gum arabic, a deal of almond-emulſion, barley-water, chamomile-tea, and likewiſe a ſmall quantity of opium, without that relief enſuing that might have been expected; on the 15th and 17th day of the diſorder, I gave him a draught compoſed of manna and Sedliz ſalts; this procured, with much relief to the patient, (though the ſtools were few in number) an amazingly copious evacuation of a matter, which was at firſt without ſmell, and yellow, but ſoon after extremely offenſive, and almoſt black. From this theory, founded entirely on experience, I can conceive the reaſon, why beſides clyſters, rhubarb is made uſe of for a teneſmus in the Eaſt-Indies.

In caſe that the patient was ſuddenly ſeized with a terrible pain in the bowels, and a violent teneſmus on a day, when he had not taken phyſick, Dr. Monro preſcribed the purging ſalts with manna: but when purges and gentle opiates were of no effect, he ordered the whole abdomen to be covered with warm fomentations; and warm barley-water, thin rice-gruel, weak broth, or chamomile-tea to be drank plentifully by the patient; afterwards he gave emollient clyſters in great quantities, and when they were not ſufficient,

cient, a ſmall quantity of the ſame, with an addition of one or two drachms of the tinctura thebaica. For he had obſerved that clyſters of this kind, impregnated with opium, often gave greater eaſe than opium given in any other manner. When the bearing down in particular was very troubleſome, a clyſter compoſed of ten ounces of water, one ounce of the mucilage of gum arabic, two ounces of oil of olives, with a proper quantity of diaſcordium and tinctura thebaica, or elſe a ſtarch clyſter, gave more relief than any thing elſe. In ſome caſes, in which the pain was quite intolerable and accompanied with fever, the Doctor found himſelf obliged to breathe a vein, and ſometimes to lay a bliſter on that part of the abdomen, where the patient felt moſt pain.

Bliſters not only act as palliatives in the dyſentery, but likewiſe contribute towards the cure; being of the utmoſt uſe in extraordinary caſes of this diſorder, as well as in the immoderate diarrhœas attendant on putrid fevers, and indeed in general in all obſtinate alvine fluxes. During the epidemy of 1766, I ſaw ſome ſlight dyſenteries in children of divers ages, from a year and a year and a half, to ſeven or eleven years old, extraordinary obſtinate, and ſome-

times very tedious. My friend Tiſſot ſaw ſomething like it about the ſame time, and complained likewiſe of the ſame obſtinacy and tediouſneſs of the diſorder, but called it only a looſeneſs; I on the contrary, by what I could ſee of it, judged it to be in reality nothing elſe than a ſlight dyſentery, as it was accompanied with a conſtant and ſometimes very violent fever, which was full as pertinacious as the flux: however, our care was not about the name, but about the beſt method of cure; and this was found out by Dr. Tiſſot. The children under my care had moſt of the ſymptoms attending the putrid dyſentery, though they did not come on them on a ſudden: I ſometimes ſaw an aſtoniſhing quantity of tough, thick mucus, vomited up at repeated times; and yet they had from forty to ſixty ſtools in twenty-four hours, which were frequently very bloody, and of all ſorts of colours, and always very ſmall in quantity; they had however much leſs pain than is commonly obſerved in the dyſentery, and for the moſt part none at all: one child only had a prolapſus ani. With ſome I made uſe of an emetic in the beginning; with others, of tamarinds, and with all, of the tincture of rhubarb and chamomile-tea: in this manner I cured in twelve days time, a boy of nine years of age, that for ſeveral years paſt

had

had been in a perfect consumption, and afflicted with various ulcers; he had indeed been something better for a few months before, but was still plagued with a considerable ulcer about the spina dorsi, and a constant hectic fever. I had not the like success with all the children under my care: some did not get well in less than three weeks; and one, notwithstanding all the pains I took, and the application of three blisters, not in less than a month; though to be sure the blisters were applied too late, and at a time when the fever was at a very high pitch, and the abdomen stretched as tight as a drum. Notwithstanding these misfortunes, vesicatories merit the preference above all the remedies hitherto mentioned in these obstinate cases. Dr. Tissot ordered them to be laid on eleven children: on one they had no effect; with another they had a visible, but transitory success; with all the rest they did more towards the cure, than all the other remedies employed for that purpose, and they cured children that could not otherwise be brought to take any medicine at all. The Doctor commonly ordered them to be applied to the calves of the legs, and, when the belly was distended, to the nape of the neck; but I, for my own part, in this case, laid them upon all three places at once.

With reſpect to the diet in this ſpecies of the dyſentery, I have already treated of the moſt neceſſary articles in the third chapter; however, there remain a couple of remarks and obſervations, which perhaps are not abſolutely ſuperfluous. All hard and indigeſtible food occaſions in this diſorder pernicious obſtructions, as the bowels which are extremely weakened, and indeed almoſt diſabled, are not capable of propelling ſuch a globular maſs as muſt here be neceſſarily formed; I cannot therefore comprehend the reaſon, why Degner, during the whole courſe of the dyſentery at Nimeguen, allowed his patients to eat potatoes. On the other hand I now perceive, why ſome phyſicians in the foregoing century, ſhewed ſuch an averſion to drink; as I have ſince that ſeen caſes, in which every ſpoonful the patients eat, if they drank after it, gave them a ſtool on the ſpot; but this very thing ought to have been an indication to them, to allow their patients to drink the more, inſtead of forbidding them to drink at all. Monro preſcribed for the ſoldiers under his care, barley-water and thin rice-gruel in great plenty; and nothing, according to this great phyſician's obſervations, conduced ſo much to the cure of the dyſentery, as the copious uſe of ſuch drinks, as obtund and involve the acrid

humours,

humours. In the epidemy of 1766, I heard much ſaid in praiſe of milk, eſpecially in various parts of the canton of Zurich; but I did not hear of any genuine and good obſervations, as nothing but the common talk came to my ears. Dr. Pringle never allowed his patients milk, even when they were getting well, except it was diluted with lime-water; as he obſerved, that milk by itſelf had a great tendency to increaſe the gripings. I allowed many of my patients grapes in the above-mentioned epidemy, without having ever obſerved any thing in them, otherwiſe than what was perfectly innocent; but, on the other hand, found in ſome obſtinate caſes, when the patient was recovering, though very ſlowly, that this fruit being permitted him without laying aſide his other medicines, at firſt purged him very well, afterwards diminiſhed the ſtools by degrees, and finally reſtored him to perfect health.

The mind, in the dyſentery, as in all other diſorders, has likewiſe need of a regimen. I ſhall in this reſpect only cite a couple of obſervations, to ſhew how the mind may do harm to the body in the dyſentery: for more refined and metaphyſical conſiderations on the regimen for the mind, a ſubject, I intend to treat of in

another work, would not ſuit with the ſimplicity I have adopted in theſe pages.

The firſt obſervation is on the pernicious effects of impatience. I have already ſaid in my work On Experience in Medicine, that ſuch perſons as will not bear with any thing, are not only ſooner ill than others, but are alſo much longer and more violently ſo; becauſe the continual alarum of their paſſions, their tormenting fears at every increaſe of their indiſpoſition, their reſtleſs and unremitting anxiety, that is not to be ſoothed by the tendereſt endeavours of their neareſt and beſt friends, always recalls to them the ſenſation of their malady; and likewiſe becauſe by the perpetual diſorder of their ſenſitive faculty, the regular and uſual courſe of the diſtemper is changed and diſturbed.

A man of forty-five years, at Brugg, that had been more uſed to indulge himſelf in the pleaſures of life, than bear with its calamities, who for that reaſon had already been almoſt driven to deſpair with a mere head-ach, and in many conſiderable illneſſes had been a melancholy inſtance of the greateſt want of ſubmiſſion to his fate, that is poſſible to be ſhewn by man, was attacked in the epidemy of 1766, with a violent

violent dyſentery. He had for a long time the advice of our famous and admired phyſician Dr. Fuchſlin, and at laſt, without the leaſt neceſſity for it, called me in to conſult with him. I ſearched into the circumſtances of the patient's complaint, with the greateſt attention, and found that Dr. Fuchſlin had purſued the beſt method poſſible: all the medicines he preſcribed, had been effectual; the fever was cured, his gripes were gone, and the colour of his excrements were natural, only his ſtools and teneſmus were ſtill conſiderable; in ſhort, I found the ſick man happily delivered from the danger of death by his firſt phyſician, the illneſs quite on the decreaſe, and nothing now ſeemed more to be done than to finiſh the cure. This province was given over to me. I laid it down as an indication, to remove the teneſmus gradually, by attemperating and expelling the peccant matter ſtill remaining in the cavities of the inteſtina craſſa, and ſo by this means put an end to the diſorder. The patient had much eaſe; often during a whole day or night very little bearing down, and a good ſleep of many hours duration: but yet the teneſmus returned from time to time, and each time in conſequence a ſtate of deſpair, which it is impoſſible to deſcribe or give a name to; the patient's mind was obſcured with a dark cloud,

cloud, which vaniſhed as ſoon, as he had company. But when his friends took their leave, all comfort, hope, or views of future joy went with them; his uſual anxiety then returned, with its long, black, and horrible train of melancholy ideas, even when he had no pain, even when he had juſt awaken out of his ſleep and found himſelf in bed. The effects of this terrible condition of his mind, were now very bad, and therefore deſerve to be deſcribed in a work, that is intended for the benefit of mankind. This truly to be pitied man, had been as well purged at repeated times of all acrid and corrupt bilious matter, as he poſſibly could be; his excrements very often did not ſhew the leaſt ſigns of corruption, but in conſequence of his miſerable lamentations, whining, and mortal anxiety at each twitching about his anus, his bile overflowed each time, and immediately on that his excrements were green. I was thus driven backwards and forwards, without coming nearer to the point for many days, till at length, by the uſe of ſome medicines opportunely exhibited, theſe twitchings about the anus went off: but it was five weeks, reckoning from the commencement of his diſorder, ere he grew perfectly well.

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The second observation is on the violent effects of wrath. Not the vulgar, but people of penetration, that is, heads that are capable of comprehending things in a philosophical manner, will easily see from this account, that a violent and often repeated provocation to anger, in a dysentery otherwise attended with a putrid fever, had converted this putrid fever to a malignant one, and that a fever of this sort became mortal, from a disposition of the bile quite different from that in the preceding case; though there was no inflammation in the bowels, and therefore nothing that could occasion a gangrene in those parts.

A man at Brugg, under the middle age, who by nature was inclined to anger, and was in circumstances of being often provoked to effusions of the gall, and had besides for many years before been very often seized with a sudden sickness at the stomach, had during the epidemy in 1766, the dysentery for four days, in the shocking manner described above under the article of Emetics. On the fifth day in the morning, he brought up six large round worms, he was as to the rest, still free from his pain, but not from his fever; the very same evening six more round worms came again out of his mouth; in the night he was obliged to

go

go very often to ſtool, his excrements were now white, with but little blood in them, and the patient himſelf free from pain. On the ſixth day he had a good many ſtools, but was ſtill without pain; on the ſeventh day, his ſtools were as few again as on the foregoing, his fever was very inconſiderable, and he without pain; he was juſt in the ſame ſtate during the whole night.

On the eighth day at five o'clock in the evening, I perceived on coming into the ſick man's room, a horrid change. His face was as pale as death, his lips white, his eyes fixed and yellow, his looks wild, his whole body in anxious motion, and all his diſcourſe was nothing elſe than a continual very boiſterous clamour for cold water. Aſtoniſhed in the higheſt degree at the horrid aſpect of my patient and his diſorder, I however aſked the poor man with the greateſt ſeeming indifference, if he had not had any great pain in the bowels, which had gone off on a ſudden? he anſwered me, No: Whether ſince the fourth day of his illneſs, notwithſtanding the frequency of his ſtools, he had not felt any more pain in the leaſt in his bowels? he anſwered me ſtill in the negative: I then aſked him whether he had not found a difficulty in ſwallowing ſince the morning? he ſaid he had: Whether he did not perceive a vaſt bitterneſs in his mouth? Yes, he did: If he

he had not anxiety at the breaſt? he had: Whether he was obliged often to go to ſtool? Yes: Whether his excrements were black? No, they were not: If they ſtank very much? No: Whether his urine did not ſcald him? it did. The by-ſtanders told me withal, that the ſick man dozed for a couple of minutes, at which time his eyes were convulſed, and that at times he was perfectly light-headed; his voice was alſo utterly changed, his pulſe feveriſh, but weak; and in ſhort, he was not to be known again. I gave him quickly ſome few tender admonitions of no ſignification, then ſlipped away out of his room, and told the family, that I would loſe my head, if there was not a quite peculiar external caſe, which they would not tell me of, that had ſubverted the courſe of my patient's diſorder in ſo extraordinary a manner. After a long ſcrutiny into the affair, I now firſt found out, that he had been often vexed in the courſe of his diſtemper, but had that day in particular had a violent fit of anger, which had immediately brought about the change; I now comprehended every thing. Agreeable to the uſual effects of wrath, the patient was farther attacked in the night-time with a very bad pleuriſy, a conſiderable cough, and a violent head-ach; the anxiety too at his breaſt

breaſt remained, together with a vaſt bitterneſs in his mouth, and he had every hour three ſtools, which were ſtill partly bloody. I thus ſaw a great effuſion of the bile, and real ſymptoms of malignity, joined with a very violent dyſentery.

On the ninth day early, I found the patient's countenance as pale as before, and the whites of his eyes quite yellow; but his looks were not quite ſo wild, and his lips a little redder. I had it now in my power, with ſome rays of hope, to bring his extremely dejected mind into a perfectly quiet and gentle ſtate; I therefore, notwithſtanding the vaſt danger he was in, ſtill gave him hopes of life, and every time I came into his chamber, put on an air of chearfulneſs. After I had now begun to treat the diſorder as a malignant one, my patient vomited with great relief. He had no more ſickneſs at ſtomach, his pleuriſy vaniſhed, the bitterneſs in his mouth went off, his head-ach was very tolerable, he had a better complexion, and all this happened in ſo ſhort a ſpace of time, as from the morning till the noon. At five in the evening his complexion was again very good, his eyes were no more yellow, and his head-ach had ceaſed; but all day long he had five or ſix ſtools every hour.

I looked

I looked at them, and found them of a citron-yellow colour, very ſpumous, ſomewhat mixed with blood, and yet not offenſive to the ſmell. He ſtill complained of a very violent heat in his urine, and even of an excoriation of the extremity of the urethra, alſo of an oppreſſion and ſtrangulation about the region of the ſtomach, and of an inclination to vomit; all the night long he had ſix ſtools every hour, very ſmall in quantity, red, yellow, and green. As to pain, he had none in the leaſt, but was very weak.

Early on the 10th day, I found my patient to all appearance quite without fever, but ſtill plagued with the oppreſſion and ſtrangulation at his ſtomach, and to be ſure infinitely weak. Soon afterwards he vomited a copious thin matter as green as graſs, with three large and live round worms; in a moment the oppreſſion and ſtrangulation in his ſtomach vaniſhed, and he again became ſomewhat chearful. All that day he had ſix or ſeven ſtools in an hour, which were yellow, green, and white. At ſeven in the evening, I found him without that anxiety, indeed, about the pit of the ſtomach, but infinitely weak and dejected in body and mind; but on having taken a proper cordial, he ſaid he found himſelf heartily well, ſlept likewiſe

likewiſe from time to time, and had, inſtead of ſeven, but two ſtools in an hour, which were in other reſpects like the former. On the eleventh day, I did not ſee my patient till three in the afternoon, and immediately found in his countenance ſuch a chearfulneſs, as I had not before remarked in him, and much more ſtrength in his voice; he had not more than two ſtools in an hour, which were leſs bloody than the former; his fever appeared to be very moderate. All night long till morning, my patient was aſtoniſhingly chearful, briſk, and free from all pain.

On the twelfth day my patient was again extremely vexed, which coſt him his life. His eyes and face were of a vaſtly deep yellow colour, his looks were wild, and his mind was quite overwhelmed with melancholy; he was obliged to go to ſtool two or three times in an hour, he had ſome fever, and great heat in his urine, but otherwiſe not the leaſt pain in the abdomen, nor bearing down; in the night, indeed, he had only two ſtools every hour, but no ſleep; a conſiderable degree of terror and anxiety of mind, yet the heat of his urine went off. The thirteenth day he had two ſtools an hour, not the leaſt pain in the abdomen, a yellow complexion, a violent cough, a conſiderable

ſiderable hoarſeneſs, great difficulty in ſwallowing, a pulſe ſlower than natural, and very dejected ſpirits; in the night-time two ſtools an hour, (with one of which he had voided a large round worm, the ſeventeenth that had come away from him in this ſickneſs) no pains in his belly, but a conſtant cough. On the fourteenth day in the morning, I found this cough ſo violent, that he could ſcarcely ſpeak; he was very hoarſe, his eyes very yellow, he had to be ſure ſome ſpirits, but thoſe very low; no pain in the belly, no bearing down, but a vaſt irritation and oppreſſion at his breaſt. From the morning till noon he voided nothing but a yellow liquor without blood; from that time till four in the evening he had very few ſtools, more oppreſſion on the breaſt than before, a continual violent cough, a ſlow and weak pulſe, his eyes fixed, and a very hoarſe voice. From four till ſeven o'clock he had two ſtools, conſiſting of a yellow watery matter. At ſeven o'clock his voice was almoſt gone; he had an inclination to doſe, was very little ſenſible, ſometimes an anſwer could be got from him, but with inconceivable trouble; he fetched his breath with great difficulty, his pulſe was very weak, and ſcarcely quicker than in health; he rattled gently in the throat, his tongue was

of a dark-brown colour, and at ten o'clock at night he died.

Thus, by the force of the moſt powerful of all paſſions, the putrid ſpecies of the dyſentery turned, in this poor man's caſe, to the malignant; and juſt as theſe ſymptoms of malignity began to ceaſe, a new fit of paſſion brought on once more an effuſion of the bile, and a fatal depoſition of that humour on the breaſt. Inſtances of this kind are by no means uncommon.

I hope I may be permitted to farther give a few hints on the manner, in which we muſt conduct ourſelves; when the cure is imperfect, when a relapſe is apprehended, or when the patient has actually ſuffered one. Dr. Pringle preſcribes in the firſt caſe the ſame diet, as during the firſt attack, and ſome gentle aſtringents; this laſt intention he fulfilled with lime-water, of which he gave a pint every day, with half that quantity of boiled milk; he ſometimes found ſmall doſes of the bark not leſs effectual, added to the extract of Campeachy-wood, or the tinctura Japonica: though it appears to me, that tincture of rhubarb alone made with water may ſerve inſtead of them all; and Dr. Monro has found, juſt as I did, that rhubarb towards the end of the diſorder is of great ſervice, though

though at the beginning it did not anſwer his expectations. Dr. Eller adviſes gentle aſtringents and corroborants joined with ſlight opiates, towards the end of the diſorder, when a great diminution or perfect ceſſation of the tormina ſhew, that all the acrimony is evacuated. Theſe remedies are caſcarilla in powder, or the extract of it given with ſimple cinnamon-water, with an addition of the extract of orange peels, and a ſmall quantity of the pillulæ ex cynogloſſo. But on the leaſt griping that his patient complained of, he had immediate recourſe with the greateſt reaſon to rhubarb and manna; and laid it down as a maxim, that evacuants of this ſort muſt be repeated as often as the pain returns; that the acrimony may not be collected again by degrees, and produce the diſorder afreſh.

In relapſes, what was done in the original diſtemper, ſhould be likewiſe done now, in proportion to the patient's ſtrength. But it muſt be remembered withal, that it is full as dangerous to ſuppoſe too little ſtrength in the patient, as too much. In the epidemy of 1766, I ſaw relapſes happen to ſome children from laying their medicines aſide too ſoon, and likewiſe to ſome adults, from their having expoſed themſelves too ſoon to a moiſt air, or ventured

too ſoon on indigeſtible food, or from their having been put into a paſſion. I cured the children with manna, tincture of rhubarb and almond-emulſion; and adults with rhubarb, or cream of tartar, or elſe with this ſalt alone; though ſometimes I returned again to the ipecacuanha. A young woman at Brugg, about thirty years old, having been expoſed to the rain during the vintage the whole day, was wet through to the ſkin, and immediately upon that was ſeized with the dyſentery in an extraordinary violent manner; I gave her forty grains of ipecacuanha, and the ſame quantity of cream of tartar, to be taken all at once, and two hours after that, a drachm of powder of rhubarb, with the ſame quantity of the above-mentioned ſalt for one doſe; with all theſe medicines, ſhe voided both upwards and downwards an amazing quantity of a bilious matter, with much pain. The ſecond day I gave an ounce and a half of Sedliz ſalts; this likewiſe brought away an aſtoniſhing quantity of bilious matter, with the greateſt relief to the patient; I gave her then for that night, half an ounce of cream of tartar to mix with a quart of barley-water; this ſhe drank all out, and her pains went off entirely. The third day ſhe thought herſelf perfectly well, and in the morning before break of day went to work in a very

damp

damp place; but not being able to ſtay there above an hour, went away, and was ſeized with a violent continued cold fit of a fever, and with ſuch a pain in the abdomen, that ſhe did nothing but turn and wind in her bed, with the moſt horrid cries; I gave her forty grains of ipecacuanha, with the ſame quantity of cream of tartar, divided the whole into four doſes, and ordered her to take one of them every hour, with a good deal of chamomile-tea. This occaſioned her, without any extraordinary ſickneſs at ſtomach, to vomit after each doſe, only once indeed, but that gave her great relief and a good many ſtools; in the night-time I gave her half an ounce of cream of tartar, to be taken in barley-water, with which my patient, after a good many copious ſtools, found herſelf better and better by degrees. On the fourth day in the morning, ſhe wanted to ſlip from me again, but I forced her to ſtay at home and follow my orders: I let her have nothing elſe all day long than almond-emulſion, her ſtools were no longer copious, and her pain very inconſiderable; but towards evening ſhe was put into a paſſion, and directly upon that her pain was three times as violent as before. The fifth day I gave her eighty grains of powder of rhubarb, with the ſame quantity of cream of tartar, and divided

it into two doſes, which purged her very ſmartly and put an end to her complaint.

To this ſection on the cure of the bilious dyſentery, I will yet add a ſketch of an univerſal method of curing it, which deſerves notice, and which I recommend to be made trial of, though it ſhould not ſquare throughout with my own opinion; for I am not at all ſolicitous about that, but only about the truth, which ought to be above any other conſideration. Dr. Duncan, one of the phyſicians in ordinary to his preſent Britannic majeſty, followed this method in the dyſentery of 1762.

After having taken away a greater or leſs quantity of blood, according to circumſtances, from ſuch of his patients as were plethoric or feveriſh, he gave every half hour four ounces of the following julep, till it occaſioned a vomiting and purging; namely, three grains of tartar emetic, and two ounces of manna diſſolved in a pint of barley-water. The next day, and for five or ſix days following, he gave his patient as much as was neceſſary to purge him well, of a drink compoſed of manna, tamarinds, and tartarus ſolubilis. When the irritation and pain were very great, he found manna diſſolved in the almond-emulſion, ſufficient

cient for his purpoſe: if the pain and teneſmus were too violent to be borne, he found a clyſter of chicken-broth, or an infuſion of linſeed in warm water, with an ounce or two of oil of ſweet-almonds diſſolved in the yolk of an egg, of great uſe, given once or twice a day. He was in general very well pleaſed, when the firſt evacuation by ſtool was very large; and he was ſtill better pleaſed, when he was able to procure this by gentle means. In this manner he often cured the dyſentery in a few days, without giving any more medicine. But when the diſorder laſted above ſix or ſeven days, he then added thirty or forty drops of the tinctura thebaica to the clyſters, and ordered a ſcruple of extract of Campeachy-wood to be taken three times a day, in a proper kind of vehicle. He allowed his patients nothing to eat but boiled rice, ſago, panada, and the like, but no meat, and not even chicken-broth in the beginning of the diſorder, no more than oil, butter, or any other kind of fat. For their drink in common, he gave them almond-emulſion, thin rice-gruel, or barley-water with gum arabic. Out of eighty ſick of the dyſentery, Dr. Duncan loſt but one, who was dying when he ſent for him; and they were all treated in this method.

I conclude in fine, with a word or two on ſome remedies and methods, which are erroneous in dyſenteries of the bilious kind. All very violent emetics and purges ought to be rejected; as by the former the body is attacked too roughly, and by the latter all its liquid parts are brought into the inteſtines, digeſtion is ſpoiled, the inteſtines weakened, and ſometimes covered with ſlight exulcerations, that terminate in an incurable diarrhœa. Scammony, aloes, and all reſinous purges are improper, and increaſe the pain. Many phyſicians of great conſideration in Switzerland make uſe of nitre; as this diſorder is undeniably accompanied with a fever, and, as they imagine, every fever requires nitre. But Dr. Tiſſot has ſhewn, that nitre is of more hurt than ſervice in the putrid fever, and that it rather promotes than leſſens putrefaction; as it only diſſolves the putrid matter more than it was before, and makes it fitter to paſs into the blood, inſtead of properly evacuating it. I therefore look upon ſalt-petre, at leaſt in the bilious dyſentery, as entirely uſeleſs; ſince in the opinion of that great enemy to all empirics, Dr. Hirzel, (whoſe penetration and caution in examining into the cauſes and effects of every thing, that happens to his patients in the courſe of his practice,

are

are not to be exceeded) it is of no real uſe, with reſpect to the diſorder itſelf.

Of all the ſpecies of dyſentery, the malignant deſerves the greateſt attention, as well of itſelf, as more eſpecially on account of the method of cure appropriated to it, ſince this is alſo very contrary to all other methods; and as Mr. Rahn's famous work on the dyſentery is ſtill overcaſt with ſome clouds, with reſpect to the diſtinguiſhing character of this particular ſpecies. The preciſe determination of this character lays a much better foundation, (at leaſt in my opinion) towards an exact knowledge and judicious treatment of this peculiar ſpecies, than mere receipts; eſpecially as according to Gruber's account, in the epidemy of 1746, in the middle of the city of Zurich, a world of people died for no other reaſon, than that many a good honeſt practitioner with his receipts in his hand, was not acquainted with this truth, which indeed is not to be found in the code of empiriciſm.

In the cure of the malignant dyſentery, a pure air is above all things requiſite. It has been found in the army, that the more the ſick are diſtant from one another, and the better the hoſpitals are provided with purer air than uſual, the

the leſs number of people there dies of this otherwiſe extremely dangerous ſpecies; ſo that thoſe quarters were always the wholeſomeſt for the ſoldiers, in which, on account of broken windows and other want of repairs, the freſh air could not be kept out. In general the greateſt danger proceeds from an impure air, which can never be made amends for either by diet or medicine. But cleanlineſs likewiſe in all reſpects is here of extreme importance; for we find in the military hoſpitals, that not only the moſt airy and ſpacious quarters muſt be pitched upon, and the number of ſick in them be leſſened as much as poſſible, but that in general the hoſpital and patients muſt be kept extraordinarily clean. If all this be not done, the malignity ſpreads to the other patients, a great number of them die, and even the moſt powerful remedies are without effect. Nay, when the infection once becomes conſiderable, the greateſt caution, and ſome ſpace of time is requiſite, before the hoſpital is entirely quit of it.

It muſt be owned that theſe obſervations have been made in the camp, and may therefore be thought of no uſe to my peaceful country; but I have already ſaid in my work on Experience in Phyſic, that a worthy miniſter told me, he often went into houſes during the dreadful dyſentery of

1756,

1756, in a village ſomething leſs than an hour's diſtance from Bern; where in one very low, ſmall, and cloſe chamber, a couple of dead bodies lay upon the table, and four or five perſons ſick of the dyſentery, men, women, and children, in their bed, who had a veſſel ſtanding open by them, in which they did their needs. We ſee then plainly, that we have alſo caſes at home, in which the dyſentery, through the accidental corruption of the air, muſt not only be contagious, but even extremely malignant; as without this additional circumſtance it has influence enough to breed the malignant fever. It is therefore alſo not to be doubted, that a fever of this kind not only inſinuated itſelf in the year 1750, in more than one place appertaining to the canton of Bern, but alſo in 1749 and 1751, in which ſame years the people of the canton of Bern in like manner died of the dyſentery in great numbers. Now, even in thoſe epidemies of the dyſentery, which are indiſputably benignant, as well as in epidemies of the malignant fever, there are always here and there malignant dyſenteries, in which the obſervation of theſe rules is of the greateſt importance. And as we ſee plainly, that malignant diſorders invade Switzerland daily more and more, perhaps the dreadful time may come

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but too ſoon, in which ſuch rules will be looked upon with leſs contempt.

Evacuations muſt be ſometimes entirely omitted in the malignant dyſentery; ſometimes emetics are noxious at the beginning, and on the contrary purgatives are ſerviceable. It is very often neceſſary to give a vomit at firſt, and afterwards purges.

Now and then, and eſpecially in caſe the diſorder be not as yet well known, a vein is opened directly at the beginning of malignant fevers; when the patient complains of a violent head-ach, and his pulſe is quick and full. Venæſection is even ſometimes repeated; if a pain in the ſide, or a violent one in the bowels diſcovers itſelf; if the patient be otherwiſe of a ſtrong conſtitution, and if a plethora ſtill be obſerved at the very time; that one thinks of giving the bark; but in other circumſtances it has always been ſeen to do harm, and weaken the patient too much. Venæſection has been adviſed and tried in Switzerland without due conſideration, even in the malignant dyſentery; but in other places the ſick have been ſeen to die upon the uſe of this remedy in the moſt deplorable manner; and I read in Dr. Baldinger's important treatiſe on the Diſeaſes of the Army, which,

which, to my detriment, was not known to me till juſt before this ſheet was printed off, that it was at leaſt not ſerviceable in the Pruſſian army during the laſt campaign. I, for my part, entirely reject venæſection in the malignant dyſentery on this account, eſpecially as I have already found it unneceſſary in the bilious dyſentery.

Emetics too and purges muſt be omitted, when the excrements are quite watery, and ſo inexpreſſibly copious, that the patients within the ſpace of twelve hours ſeem as if they were dying, and ſometimes actually die; in which caſe all evacuating medicines ſhould be avoided, and recourſe be immediately had to ſtrengthening and conſtipating medicines.

Emetics are omitted occaſionally, when in particular circumſtances or times experience ſhews that they are noxious: and ſometimes they do not make the patient vomit in the leaſt. In that extremely malignant dyſentery, that happened in Saxony in the year 1746, and which is ſo excellently deſcribed by Dr. Vater, ipecacuanha at the beginning of the diſorder was manifeſtly hurtful; though on the other hand, during the progreſs of the ſame, it did very good ſervice. In the malignant dyſentery,

tery, that appeared the ſame year, though in a much leſs degree, at Zurich, emetics were found juſt as noxious; for as to their effects in benignant caſes, it is not here the queſtion. Siegeſbeck has deſcribed in the Breſlaw Journals, a dyſentery of the malignant kind, obſerved by him in the year 1717, in which the choiceſt ipecacuanha, which had excited vomiting in all other caſes, did not provoke it in the leaſt at the beginning of the dyſentery, even given at the time when the patient abſolutely retched to vomit. In like manner I ſaw in the epidemy of 1766 at Brugg, an extremely malignant caſe in a boy of ſeven years, whom, on the firſt day of his diſorder, I could not get to vomit with twenty grains of the beſt ipecacuanha, neither had he any ſtool from a purge, that I gave him directly after. On the ſecond day he was obliged to go to ſtool often, but, except a large worm, he hardly voided any thing at all; he looked very oddly, his eyes were as fixed as if they were made of glaſs, his head vaſtly heavy and ſtupified, and the lad was indifferent to every thing, even to the pain in his belly, which he only ſpoke of now and then when I aſked him about it; I could not find any pulſe he had, though I felt for it all over his body. About eleven o'clock at night he grew quite cold, had often convulſive motions in his eyes, was

forced

forced to go to ſtool four or five times an hour, his excrements were black, and each ſtool did not amount to the quantity of half a tea-ſpoonful. The third day in the morning, I found the child in the ſame ſtupified ſtate as before, his face and lips quite pale, his eyes fixed, his tongue brown, no pulſe in any part of his body, though none of his limbs felt in the leaſt cold; he often fetched a deep ſigh, and told me with the moſt extraordinary indifference, that he had a pain in his belly. On his hands, arms, back, neck, and breaſt, I found many thouſand very ſmall brown and bluiſh ſpots, the very worſt ſort of petechiæ. I ſaw him again at two in the afternoon; he went to ſtool very often, but each ſtool was not half a tea-ſpoonful; about four o'clock he was at times cold, and the ſpots then appeared paler, he went ſeldomer to ſtool, and did not void any thing; at ſix in the evening I found him in the ſame condition, with the ſame indifference about his pain, which ſtill remained; he had a frequent and very violent bearing down, and did not bring away the leaſt excrement. From nine till eleven o'clock at night, he ſtill ſpoke at times, when he was ſpoken to, but always with the greateſt indifference, and without any other ſymptom intervening, he died at half an hour paſt one the next morning.

Where

Where then emetics do not ſucceed, we keep to purges alone; and when theſe too, as in the caſe juſt related, have no effect in the leaſt, we endeavour to promote ſweat, if nature appears to incline to this evacuation. Profeſſor Vater gave with no ſmall relief to his patients, in the dreadful epidemy in Saxony, directly at the beginning of the diſorder, gentle and ſometimes likewiſe ſmart purges; the firſt to ſuch as had very copious ſtools, the latter to ſuch as with a conſiderable bearing down, had no ſtools at all: however, he kept to gentle purges even in the laſt caſe, when the teneſmus was quite intolerable: in all caſes he gave three or four hours afterward ſomething ſtrengthening, and repeated this procedure every two days, with good ſucceſs. In the epidemy at Zurich, the judicious Dr. Landolt, at that time chief phyſician to the city, gave ſudorifics immediately at the firſt attack of the diſorder; when the patient had as yet no pain nor alvine evacuation, by which means he in effect forced out the exanthemata with good ſucceſs; but when the ſick did not aſk his aſſiſtance before the fourth day; when their pain was great, and their ſtools copious; the Doctor preſcribed a doſe of rhubarb, and did not till after that provoke the ſweats. Perhaps in this laſt method of proceeding, the eruptions did not follow; though Dr. Gruber does

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not ſay any thing about it: but I know too well, both from my own experience and that of others, and will prove it in its proper place by appoſite obſervations, that in general a miliary eruption, and even the petechiæ, may be very often prevented, when proper evacuations are made directly at the commencement of the diſtemper.

On the other hand, when the ſtomach and bowels are loaded with great quantities of corrupt matter (which is often, though not always the the caſe) the evacuation of the former is of vaſt importance, as well as of the latter; eſpecially, if the cauſe of the ſudden and total dejection of the patient's ſtrength be ſituated in the ſtomach. In general ipecacuanha is uſed in malignant fevers, when the patient complains of much ſickneſs at ſtomach; and he commonly finds himſelf better a few hours after having taken it. This emetic ſhould by rights be given at firſt; but (when it has happened to be neglected ſo long) it has been often found very ſerviceable, when given at the eighth, ninth, nay twentieth day in malignant fevers; and it may be always given after the commencement of the malady, when no inflammation is obſerved in any part, and the patient has ſtill ſome force left. It is alſo repeated in the courſe of the diſorder with good effect;

if the nauſea and ſickneſs at ſtomach return, or in caſe that the ſtools ſmell uncommonly offenſive. Huxham ſaw very often in a malignant fever an aſtoniſhing change for the better enſue on a vomiting with ſtool ſupervening on the eighth or ninth day. Dr. Brockleſby is convinced from repeated trials, that gentle vomits preſcribed even a ſecond time on the ſeventh and eighth day in theſe fevers are of ſervice, and even after that time, if ordered with prudence. There is much alſo to be learned with reſpect to the evacuation of the putrid humours, from what Dr. Baldinger ſays on the method of cure in the fever, with which the Pruſſian ſoldiers were afflicted, by the German phyſicians uſually called the malignant catarrh fever, and by me ſimply the malignant fever.

Theſe obſervations are however not to be abſolutely relied on without ſome exception in the malignant dyſentery. Ipecacuanha is without doubt the principal remedy in this ſpecies of dyſentery; but it is of the greateſt importance to give it by way of emetic directly at the beginning, before all the humours of the inteſtines are infected: its operation is promoted by chamomile-tea, which perhaps is much more requiſite in this diſorder than in any other; as chamomile flowers are extremely antiſeptic.

Seven

Seven or eight hours after this firſt evacuation by vomit, rhubarb ſhould be given in order to procure an evacuation alſo by ſtool.

Some great phyſicians do not ſtick at making uſe of manna, ſal catharticum amarum, and oil, or any ſlight purge of that ſort; but preſcribe after it a gentle opiate at night, to eaſe the patient's pain, and give him ſome reſt: they likewiſe repeat this purge three or four days after, that the putrid excrements may not be collected in the bowels in too great quantities. Dr. Monro does not heſitate to give gentle purges from time to time throughout the whole courſe of the malignant dyſentery, when he has done every thing elſe in the mean time requiſite in a dyſentery of that kind. A perſon of equal reputation, Dr. Baldinger, late phyſician to the army of the king of Pruſſia, gave purges as long as any pain was perceived; but he alſo ſaw with great penetration into the true uſe of ipecacuanha, which he mixed with equal parts of rhubarb, and gave the firſt day to the quantity of twenty grains, and afterwards five grains three times a day.

However it is beſt perhaps, after having purged the patient with rhubarb, to have recourſe again to the ipecacuanha alone, and that on

account of the antiſeptic powers quite peculiar to it, and of the great uſe, it is found by experience to be of in malignant diſorders in general. This however muſt be given only in very ſmall doſes to the quantity of two, three, or four grains at moſt, every two hours, with a tea-cup full of chicken-broth, or of veal-broth, to which is added a ſmall quantity of chicken-broth, with ſcorzonera roots, carrots, or celery.

Theſe broths (as much as I have otherwiſe ſpoken againſt them in the bilious dyſentery) ſhould be the patient's only food, and that with a view to keep up his ſtrength: for the degeneracy of the humours in malignant fevers ſeems to differ from the degeneracy of the ſame in the bilious ſpecies not only in degree, but even in characteriſtic ſymptoms: the conſiderable difference ſubſiſting between the medicines employed in bilious and malignant dyſenteries, ſhews the neceſſity for making this difference in diet, eſpecially as it is of great importance to keep up the patient's forces in malignant dyſenteries, with what is found to do it by experience; and this quality belongs inconteſtably to chicken-broth, though in other caſes it has manifeſtly a contrary effect. But if it be found neceſſary to ſtrengthen the patient more effectually, ſome crumbs of bread are to be boiled in the broth,

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and directly after eating it the patient ſhould take every four hours a ſpoon full of old white wine, which muſt not however be too ſtrong. The Frankfort, Moſelle, and Rheniſh wines are moſt proper for the Germans; the wine from the marquiſite of Baden and the Lacote wine for us; and for the French, a wine very like the laſt mentioned, which comes from Grave in Guienne, a few leagues from Bourdeaux, on account of their reſpective cordial, and at the ſame time antiſeptic powers.

Wine does as much good in this ſpecies of dyſentery as harm in the others: though ſome Swiſs philoſophers, quite ignorant of medicine, are as little informed of this, as of the ſlightneſs of ſome and the malignity of other caſes in the dyſentery; and yet proud of their ſophiſms, think themſelves able to overturn with one whiff of their breath the pillars of phyſic, and with their ſhallow doubts quibble the phyſicians out of all pretenſions to the leaſt certainty in their profeſſion.

In malignant fevers in general, according to the obſervations of her Britannic majeſty's phyſician in ordinary, now Sir John Pringle, nothing exceeded the effects of wine in ſuch pa-

tients, as were weak and deprived of all ſtrength. His patients ſhewed a particular deſire for ſomething cordial; when, together with a ſlow and weak voice, they had had the fever a conſiderable time; and nothing was then ſo ſalutary as wine: they did not long after any kind of food, but yet eat with a great deal of pleaſure a little ſoup with crumbs of bread, provided there was wine in it. On the other hand ſuch as were delirious, with a * quick voice, wild looks, ſubſultus tendinum, or violent geſtures, could not bear either wine or heating medicines, nor even common cordials. Now Dr. Pringle will have the malignant dyſentery treated in general like a malignant fever; he therefore adviſes the uſe of wine in certain circumſtances in this dyſentery: he allows it in general in this diſorder, when the patient's ſtrength is decreaſing, and his voice low and weak; but he adds that we can be never abſolutely ſure of the effects of wine, till we have tried it. Dr. Monro in like manner made uſe of wine in the malignant fever with great ſucceſs, and in general the lateſt and beſt phyſicians in Great-Britain agree in this reſpect. In the malignant dyſentery one of the greateſt maſters of our profeſſion, her imperial majeſty's

* Theſe are Sir John Pringle's words: though the German (by miſtake, as I imagine) has it "weak voice."

firſt

firſt phyſician, baron Van Swieten, orders an ounce to be taken every hour of a diet drink, which conſiſts of half a pint of wine, a pint and a half of barley-water, one ounce of cinnamon-water, and ſix drachms of ſugar.

Acid liquors are uſually given in malignant fevers, as plentifully as ever the ſtomach and bowels will permit. But the lateſt diſcoveries with us have ſhewed, that acids given alone are noxious in theſe fevers, and more eſpecially in malignant dyſenteries; in which therefore the excellent Dr. Schintz in Zurich, ſeems with good reaſon to be afraid of fruit; though profeſſor Vater ſaw a malignant dyſentery cured with raw prunes. The bowels are in this dyſentery ſo much weakened by the venom which they harbour, that they can neither bear the ſame quantity of liquids, nor thoſe of ſo very emollient a nature, as in the other ſpecies of dyſentery. A too great quantity of liquor finds no paſſage out of the body, increaſes the anxiety, diſtends the belly, and cauſes a retention of urine. The ſame happens, when the liquor is only emollient; by which beſides the patient's weakneſs is increaſed. This ſame debility is alſo the cauſe, that the uſe of pure acids, which are otherwiſe an antidote to putridity, does more harm than good in the malignant dyſentery; for which reaſon the patient's

ſhould be neither in too great quantity, nor too emollient, nor too acid. A ptiſan of freſh Seville oranges cut into thin ſlices, ſtrewed over with ſome ſugar, and infuſed in boiling water, poſſeſſes all the qualities here requiſite; the peel is aromatic, the white has a kind of a corroborating bitterneſs, the juice is acid, and all this together has a very good effect. A great many ſuccedaneums to this ptiſan may be prepared by pouring water on a bitter ſubſtance, and then making it a little ſour. But when the patient's loſs of ſtrength is extremely great, wine is the only acid that ſhould be made uſe of.

Clyſters of a laxative, emollient, fat, oily nature, are pernicious. A great many clyſters ſhould never be given, and thoſe not large, at moſt not containing above ſeven or eight ounces: the only proper ones are ſuch as conſiſt of nothing but infuſions of bitter herbs and flowers, as chamomile flowers, melilot, and burnet.

Some phyſicians, who firſt remarked that the watery puſtles appearing on the ſkin were of ſervice, and yet did not know, that inſtances of cutaneous diſorders, that went and came according to the increaſe or decreaſe of the diarrhœa, are to be found in the writings of Hippocrates, and that Themiſon has long ſince adviſed the uſe of

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cupping-glaſſes, ordered their patients to be cupped with the beſt ſucceſs. Others ordered their patients arms, thighs, and legs to be burnt with red-hot irons, as directed by Hippocrates, and very much practiſed in the ſixteenth and ſeventeenth centuries; which, in a very bad epidemy, accompanied with black ſpots all over the body, that happened in England in the year 1513, was the only means of recovery. In our times we know the art of doing as much or more ſervice with infinitely leſs pain. Galen adviſes in the dyſentery every thing in general, that draws the morbific matter to the ſkin, and many have followed this doctrine. Reſtaurand publiſhed 90 years ago divers obſervations on obſtinate diarrhœas and dyſenteries, that he had cured not only with red-hot irons, but alſo with bliſters; and Theophilus Bonnet ſays, that theſe laſt are the moſt effectual of all remedies to procure an afflux of the humours towards the ſkin.

However, for as much as I know, theſe hints have not been purſued; for Dr. Pringle and Monro made uſe of bliſters merely for the pain. The honour of firſt having revived the uſe of veſicatories in malignant dyſenteries, belongs to two phyſicians illuſtrious for their inventions in the practice of phyſic, Dr. Hirzel of Zurich and Dr. Tiſſot, though neither of them knew any thing

thing of the other's discoveries. Dr. Hirzel began with a woman, that in the malignant dysentery had convulsions and fainting fits every quarter of an hour, and during the intervals lay in a perpetual delirium; he delivered her from this dreadful disorder chiefly by means of blisters; and thus effected a cure, which to me indeed appears considerable, but the lustre of which the doctor obscures by making as dextrous and important cures almost every day. Dr. Tissot saw in many cases his patients stools and anxiety diminish, and their strength increase, as fast as these plaisters operated; he therefore never neglects this auxiliary in malignant dysenteries, except a great deal of pure and dissolved blood comes away with the stools.

All these remedies are sometimes not sufficient, when the patient's pulse sinks, his strength is brought down, and he himself oppressed with anxiety; the disorder then requires all the same remedies that are necessary in malignant fevers. The bark claims a place here above all the rest.

It is well known, with what success her imperial majesty's physician in ordinary, Dr. De Haen, made use of this simple in malignant fevers; and what great merit he has, in having exactly determined the method requisite to be followed in this case. Dr. Monro imitated him

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in the Engliſh army in Germany, and gave in malignant fevers in general, the bark in large doſes: he treated above 150 Engliſh ſoldiers in this manner, and though he did not obtain his end with all of them, yet he found this medicine better than any other.

Dr. Medicus of Manheim, now reſiding in Paris, a firſt-rate medical genius of 29 years practice, has confirmed this doctrine to me by word of mouth (while this work was at the preſs) from his own numerous obſervations. I ſhall find another place for my own obſervations; which tend to prove in like manner the excellency of the bark in malignant fevers, when the putrid matter is previouſly evacuated.

Degner, as eſtimable as he is in many other reſpects, in the ſecond edition of his Treatiſe on the Dyſentery, judged in a very unphiloſophical and indeterminate manner, on the uſe of the cortex in the dyſentery in general; as he only ſupports his opinion with ſaying, that certain ſurgeons had killed with it a good many ſoldiers, that lay ill of the dyſentery. It is indiſputable, that all ſurgeons do not underſtand the catechiſm of experience; but this I know, that great phyſicians have made uſe of the bark in the malignant dyſentery with good ſucceſs. Dr. Monro,

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as ſoon as petechiæ appeared, or the fever was obſerved in any wiſe to remit, gave every four or ſix hours a drachm of an electuary, conſiſting of equal parts of the uſual electuarium è cortice Peruviano, and diaſcordium; or half a drachm of powder of bark, or 20 grains of its extract in the ſpiritus mindereri, with four or five drops of the tinctura thebaica; and in the evening an opiate proportionate to the effect of the preceding doſe, and to the number of the patient's ſtools. It muſt be confeſſed, that my friend Monro was not ſucceſsful with all his patients; however, he found this method better than any other he tried. Dr. Tiſſot gives in malignant dyſenteries the extract of bark diſſolved in orange flower-water, but never in very large doſes, and not above two drachms in 24 hours.

The cortex is alſo principally of importance, when any external part of the body is ſeized with a gangrene. This does not ſeldom happen in malignant dyſenteries; and Dr. Baldinger, who has ſeen ſo many caſes in the Pruſſian army during the laſt war, and thoſe, contrary to cuſtom, with ſo great accuracy, has often remarked in fevers and diarrhœas, that the gangrene began at the tip of the noſe; that then the whole cartilaginous part of the noſe became of a dark-red colour like a cherry; whence it proceeded

proceeded to the eyes, attacked the cheeks, and for the moſt part killed the patient within five or ſix hours. I remember to have read a remarkable caſe that happened in England, and is written in the Engliſh language, which deſerves to be repeated here. A briſk and tolerably healthy widow of a middle age, that had lain a fortnight or three weeks very ill of the dyſentery, and had not been ſufficiently purged, was attacked with violent diſtractile pains, deeply ſituated in her legs and feet, and particularly in one leg and foot, which her phyſician at the ſame time found cold and ſtiff. He gave her directly internally the compound decoction of ſnake-root, according to the Edinburgh Diſpenſatory, and ſtrong aromatic fomentations for her leg and foot; notwithſtanding which, the next day the firſt joint of all the toes belonging to that foot was mortified; the gangrene proceeded too round about the margin of her foot under the little toe, and a broad ſpot of a browniſh-yellow hue appeared on the top of her foot towards her great toe: her dyſentery was ſtill very violent. The decoction of bark was given her immediately upon that, which ſhe took for a long time. This put a ſtop to the progreſs of the gangrene: a ſlight inflammation appeared round about the margin of the gangrened part; the dark-yellow ſpot on the top

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of her foot grew at firſt of a bright-red, and aſſumed by degrees the natural colour of the ſkin. Her gripes and teneſmus decreaſed by degrees; her ſtools grew natural without the aſſiſtance of any other purgative or anti-dyſenteric medicine than rhubarb, which was mixed with the decoction of bark; the mortified parts ſeparated every where from the bone, and the ſick perſon recovered.

Camphor deſerves a place next the cortex, or in the ſame rank with it for raiſing the patient's forces in the malignant dyſentery. This is in like manner a ſtrong antiſeptic; and, according to Dr. Baldinger's frequent obſervations made in the Pruſſian army, increaſes the efficacy of the bark, and heightens its antiſeptic power. Camphor is very conveniently joined with the extract of the bark, and even with ipecacuanha; theſe three medicines may be given at the ſame time, and even mixed together in a mixture or bolus; or the two firſt be adminiſtered likewiſe after the ipecacuanha; which laſt is particularly uſeful when the patient abounds with mucus; but the uſe of it may be diſpenſed with, when no more mucus appears, and the abdomen remains ſoft: but the camphor muſt not be given in large doſes any more than the extract of bark, and not above the quantity of

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ſixteen grains in twenty-four hours. Sometimes as an external application, with the ſame view and with good ſucceſs, we make uſe of a piece of flannel dipped in a bitter decoction boiled up with the theriaca, and applied warm to the ſtomach and abdomen; or even of a plaiſter prepared with the theriaca alone.

When in the malignant fever in general, even though the patient at the ſame time took the cortex and wine, the pulſe ſank, and a delirium came on with other bad ſymptoms, Dr. Monro laid the bark aſide, and gave a cordial mixture with fifteen grains of muſk, ordering the wine to be boiled up with cinnamon. The next day his patients were better, their ſkin was moiſtened, their pulſe roſe, the feveriſh ſymptoms went off by degrees with the uſe of the ſame medicines, and they got well: the confectio cardiaca, ſnake-root, with other medicines of that ſort, had the like effect. I relate this however only with a view to mark out with one ſingle ſtroke of my pen the perfectly peculiar nature of a malignant fever for the uſe of ſuch, as make a hotch-potch of all fevers, and then attack it with the like hotch-potch of medicines. It is well known how advantageouſly Bontius has ſpoken of the extract of ſaffron in malignant dyſenteries, and how famous this extract

tract is at preſent, ſince Dr. Pringle's lateſt obſervations, as much on account of its antiſeptic as of its cordial properties: but I tremble, when I think, what havock phyſicians, that underſtand nothing but receipts, will make among their patients with all theſe medicines, in diſorders which they do not know, and in caſes which they cannot diſtinguiſh.

Aſtringent and conſtipating medicines are of uſe, in certain obvious circumſtances, as well in the malignant dyſentery, as in malignant fevers in general. Many perſons afflicted with the malignant fever, have ſometimes a diarrhœa withal, which ſeldom terminates favourably; and ſome are even at that time ſeized with the dyſentery. A ſlight diarrhœa, that does not very much weaken the patient, is indeed in general ſerviceable, particularly if it appears at the height or towards the end of the diſorder. But one that is very conſiderable, or actually degenerates into a dyſentery, is extremely dangerous; as every thing that retains the ſtools increaſes the fever; and as, on the other hand, the continuance of the purging brings the patient very low, and indeed in a ſhort time to the grave. In this caſe Dr. Monro was abſolutely obliged to give an opiate after each purge. Dr. Pringle made ſuch a point of gradually ſtopping by

by these means the purging, which appears towards the end of a malignant fever, that he added a few drops of laudanum, or a small quantity of theriaca to his alexiterial julep, or else exhibited a spoonful or two of a restringent mixture. For though this looseness might be looked upon as serviceable, it was still to be put a stop to; if the patient was too weak to undergo such an evacuation. Dr. Pringle has also very often observed, that when it was stopped in the above-mentioned manner, the sick person fell soon afterwards into a moderate sweat, that carried off the disorder. In the worst cases of the malignant fever, and especially when it is accompanied with the dysentery, the stools are often bloody; in which dangerous situation the Doctor orders these same medicines to be tried, if any thing can yet be done for the service of the patient. After frequent relapses of the malignant fever the blood was so dissolved, that the patients bled violently at the nose, and blood even came away with their stools: if they had a diarrhœa with it, Dr. Monro joined diascordium with the bark, giving a dose of opium at night, and at the same time nevertheless exhibited the tincture of rhubarb.

Now it is really dangerous in this dysentery to proceed immediately without the preliminaries

above-mentioned to reſtringents. To be ſure the ſtools have been ſometimes retained by theſe latter without the former having been premiſed; but they have alſo occaſioned the greateſt anxieties and a violent perturbation of the ſenſes, and have finally been the patient's death, or threw him into a quartan ague, hectic fever, or oedematous complaints. But when the violence of the diſorder was allayed, when the head-ach, fever, teneſmus, convulſions, and the other ſymptoms remitted, and nothing remained but an obſtinate purging, in that caſe Dr. Vater gave in the epidemy in Saxony I have ſo often made mention of in this treatiſe, the ipecacuanha as an emetic with the greateſt ſucceſs; for it often put a ſtop to the diarrhœa: if it did not, he gave with a very good effect aſtringent powders compoſed of radix tormentillæ, nutmegs, and terra Japonica, in a mixture of theriaca, diaſcordium, and cold water, (which he found much more ſerviceable than warm) and with this cured his patients in a ſhort time. Sometimes however one is forced to add reſtringents to the corroborant remedies early in the diſorder. In very ſevere caſes, when the patient's mouth and œſophagus were threatened with aphthæ, and when they were actually covered with them, the ingenious Dr. Whytt of Edinburgh preſcribed

with

with ſucceſs the confectio Japonica according to the Edinburgh Diſpenſatory, with a ſtrong decoction of the bark. And in general an extraordinary quantity of ſtools in this dyſentery require narcotics and reſtringents; on which account alſo baron Van Swieten preſcribes a grain of opium morning and evening.

But we muſt here proceed with the greateſt caution. Malignant diſorders do not only appear at firſt not ſo dangerous as they really are, but all the remedies made uſe of with ſucceſs by very great phyſicians in theſe diſorders in general, and eſpecially in the malignant dyſentery, are a deadly poiſon in ignorant hands, if its various ſpecies are not diſtinguiſhed with the greateſt penetration; or if the phyſician be ignorant that in the ſame ſpecies the ſame remedies either kill or cure at different junctures. Millions of people might have been ſaved from an untimely grave; if in conſequence of a more accurate knowledge of the true cauſes of weakneſs in fevers, this great maxim had been underſtood, that the patient is moſt ſtrengthened when the cauſe of the diſtemper is diminiſhed; and that the reſtoration of the forces is the firſt, chief, and only view in all diſorders with blockheads alone.

The catalogue of the medicines that have been recommended to this time downwards in malignant dyſenteries, is of an infinite extent. If we eraſe all thoſe which experience has ſhown to be detrimental, we ſhall ſee, that all the reſt agree in properties with thoſe I here adviſe. I have only recommended the moſt efficacious, and I believe they may very well be ſubſtituted for the reſt, and do every thing that is expected from our art in malignant dyſenteries; for in this ſpecies nature does nothing; and the reader has ſufficiently ſeen, that ſuch as deſpiſed all phyſic and phyſicians, ſuffered and died in the moſt miſerable manner. But it is upon this very account, that our art often falls ſhort in this dreadful diſtemper, as not being ſupported by nature, eſpecially when the phyſician does not attack the diſorder immediately at its firſt riſe, and before it has irrevocably damaged the primæ viæ. Great phyſicians have fully experienced, that there are degrees of malignity in which all methods and medicines are of no avail, and in which there are unexpected metaſtaſes of the malignant matter from parts, on which they had not ſo pernicious an effect, to the brain, where they induce ſudden death, at a time when the patient thinks himſelf almoſt recovered. They honeſtly own likewiſe, that they never durſt make any certain prognoſtic of the event in malignant

epidemic

epidemic dyſenteries; as on the one hand patients, whom they looked upon in a very bad light, and perfectly deſpaired of, happily recovered; and on the other hand, ſome died ſuddenly, that had but ſlight ſymptoms of the diſtemper, and whoſe recovery appeared to be certain.

The indeterminate idea commonly annexed to malignant diſorders in general, and to the ſymptoms of malignity in particular, is as great an evil, as the juſt now remarked uncertainty in the thing itſelf. Throughout all Switzerland the common-rate phyſicians call every diſorder malignant, which they do not underſtand; and according to them, every diſtemper, of which their patients have died muſt be malignant beyond all contradiction. Formerly all diſtempers attended with puſtules or ſpots on the ſkin, were looked upon as malignant without exception; and on this account they always endeavoured to cure them by ſweating the patient with heating remedies. The ſmall-pox and all fevers attended with any notable degree of inflammation, which were only to be cured by cooling remedies, were nick-named malignant, attacked with the moſt heating medicines, and conſequently, as Sydenham ſaid, this ſame word malignity did more hurt to the world than the invention of gunpowder. In order to expel this malignity, it

was formerly the cuſtom at Vienna, (which has now in theſe later times taken a more philoſophical turn, and that in my opinion chiefly by the means of ſome philoſophichal phyſicians that practiſe there) to call the fratres miſericordiæ at the firſt ſight of the exanthemata, who, by the means of blankets, wrappers, &c. faſtened the patients down to their beds ſo effectually, and covered them up ſo cloſe, that they could neither ſtir nor breathe; ſo they had the exanthemata very happily out upon them, and died. But I alſo often find here and there in modern writers ſuch confuſed indeterminate ideas of malignity, and thoſe ſo very hypothetical withal; that I ſhould be aſtoniſhed at the want of a philoſophic turn of thought in this our moſt philoſophic age, on this and other occaſions, if I did not ſee with my own eyes how many phyſicians of the higheſt reputation know as yet nothing of the improvements made in our days.

In fine, the abuſe of many medicines, which in ſome caſes are of real ſervice, and in a thouſand others extremely deſtructive, ſerves to prove here in its right place the following maxim, that a partial notion of phyſic is juſt as dangerous as one that is entirely falſe. I have, from an experience of their virtues, recommended corroborant and ſtrengthening remedies in the cure

of

of malignant fevers in general, and of the malignant dyſentery in particular. But I am afraid of their being abuſed, a fate that has often been known to attend them; as the general rules for the cure of malignant fevers are extremely limited; as a perturbation of the ſenſes may proceed from two quite oppoſite defects, the one from large and repeated venæſections, the other from heating and cordial medicines having been given too ſoon; and likewiſe, as the imprudent and on that account very common uſe of wine, as ſurely hurts and kills the patient in a malignant dyſentery, as in an inflammatory fever. Phyſicians, that want for genius and experience, can never perceive the preciſe juncture of time, in which a rapid and very dangerous diſorder requires the uſe of wine, in which there is that peculiar ſpecies of weakneſs, that only yields to the uſe of warm and cordial medicines. Nothing is eaſier in this caſe than to commit an error, and the certain conſequence of the leaſt error of this kind is death.

I now turn to the cure of that period or ſpecies of the dyſentery, which is called the chronic, and in which as many blunders are committed as in any other ſtate of this diſorder.

It is infinitely difficult to cure people of the dyſentery, that have been ruined by a falſe method of cure with carminatives, cordials, aſtringents, and narcotics, and thence are afflicted with ſlight inflammations in the bowels, or a kind of paralyſis in them, have indeed little pain, but yet are daily and frequently harraſſed with painful ſtools, and whoſe forces are vaſtly exhauſted. If the phyſician is called too late, or the patient neglected, or badly treated; if he has, from a too great loſs of his fluids, a ſlow weak pulſe, vaſt general debility, a rough dry cruſt on the tongue and the inſide of the mouth, excrements, in which the villous coat of the inteſtines may be diſtinguiſhed, and a great relaxation of the bowels, he is then without doubt in much danger of his life; and in that caſe likewiſe, in the opinion of many great phyſicians, there is nothing more to be done, than what is uſed to be eſſayed in a ſuppuration of the inteſtines: as in this high and dangerous degree of the dyſentery vomits and purges are very ſeldom of any uſe; and as too at that time opiates have hardly any effect either in relieving the pain, or putting a ſtop to the flux. The reſt of the cure ſhould be left to the ſick man's natural forces, of which he is perhaps not yet entirely deſtitute; with which however the quite exhauſted,

exhauſted, but patient ſufferer is ſometimes ſtill ſupported for many weeks, and even months, on the brink of the grave, and by degrees brought to a perfect recovery. Dr. Monro ſays, that he was never more ſucceſsful with any diſorder in the Engliſh army in Germany than freſh contracted dyſenteries; but when they had continued ſome weeks, and were in a manner become chronical, all his endeavours were then frequently fruſtrated, and a great number of his patients died. Dr. Cleghorn too at Minorca found all dyſenteries, that were not cured ſpeedily and in the beginning, at leaſt obſtinate, and in ſpite of a great number of highly extolled ſpecifics, too often fatal. The Engliſh phyſicians and ſurgeons, that were laſt war in the American ſervice aſſured Dr. Monro, that they had full as bad ſucceſs with dyſenteries of long ſtanding in America, as he in Germany. However it muſt not ſurely be concluded from all this, that every chronic dyſentery is a loſt caſe, and on that account ſhould be given over, and the cure not attempted; for many have with great care, and by the ſtrength of their conſtitutions, got over even this diſorder by degrees, and enjoyed their health again; eſpecially thoſe that held out the winter, and remained alive at the appearance of the warm weather.

The indication towards the cure of the chronic dyſentery is in general, to evacuate the putrid humours, and at the ſame time ſtrengthen the bowels. In ſuppurations of the inteſtines eſpecially, we ſhould endeavour to cleanſe, and withal heal up the ulcers. But all this is not ſo eaſy to be done: for a great many attempts have been made to cure this dyſentery, many have failed, and ſome were not uſeleſs. I ſhall paſs over ſuch as have miſcarried, and ſhall recommend thoſe that ſeem to promiſe ſomething more; after that I ſhall give the moſt univerſal and beſt method of curing this ſpecies, and laſtly add a few more cautions on this head.

In difficult caſes of the chronic dyſentery Baglivi adviſes to pour turpentine on live coals, and to take in the vapour of it at the poſteriors, and hence he promiſes a certain cure; to which however I do not give a great deal of credit. Huxham, with many others, at firſt makes uſe of warm water, as it cleanſes the inteſtines very well, and likewiſe paſſes very eaſily into the blood; but when once the acrid humours are evacuated, he then very rightly adviſes cold water, and aſſures us, that with this alone and opium he has ſometimes, after the proper evacuations had been premiſed, compleated the cure. This method ſhould by all means be tried

tried in the chronic dyſentery; and while this work is at the preſs a very remarkable inſtance has happened to prove the ſalutary effects of cold water in obſtinate dyſenteries. Dr. Smith of Bellikon, phyſician in ordinary to the princely foundation at Einſidlen, one of the moſt learned and judicious phyſicians in Switzerland, writes me word, that during the epidemy in 1766, he had treated with the greateſt care a woman of 63 years, that lay ill of the dyſentery, with various medicines during the ſpace of ten or twelve days; but when at length he ſaw the diſorder was not in the leaſt diminiſhed, he ordered her to drink a glaſs of quite cold water every four hours, and allowed her no other nouriſhment than lukewarm milk. She did this three or four days with ſuch ſucceſs, that her ſtools grew much leſs frequent, and there was no more blood to be ſeen in them; her pain and bearing down diminiſhed, and at length the patient was compleatly cured by this method, which, by its noble ſimplicity, does honour not only to the phyſician, but likewiſe to the art of phyſic itſelf.

The ſimaruba has been moſt made trial of. Juſſieu and others make a great noiſe with this bark; perſons that have been plagued with diarrhœas, and chronic dyſenteries for many months

months and even years together, Juſſieu has for the moſt part ſet up again more ſpeedily and certainly with this, than with any other medicine; and that without occaſioning any indiſpoſition, without the leaſt hindrance of any of the natural functions, and without the leaſt bad conſequence enſuing; he even cured diarrhœas with this bark without the leaſt prejudice in the midſt of the hemorrhoidal flux, or the menſtrual evacuation; and he actually gives it out univerſally, that this bark is a certain cure for inveterate, watery, mucous diarrhœas, proceeding from a continual convulſive motion of the inteſtines, without prejudice to the ſtomach, and without the leaſt irritation in the bowels. Du Buiſſon has long made uſe of it in all immoderate alvine fluxes, in old looſeneſſes with indigeſtions, and in general in all diarrhœas of long ſtanding with a good effect. Dr. Winter, formerly phyſician to the prince of Orange at the Hague, and profeſſor in Leyden, cured three perſons with the ſimaruba within a few days of an extremely obſtinate, though mild dyſentery, in which ipecacuanha and rhubarb, paregoric, aſtringent, and other remedies had not been able to do any thing in many months.

But all this requires ſome limitations. The ſimaruba does not always effect what is expected from

from it; for during the impreſſion of this work, my advice has been ſent for from Germany in a tedious dyſentery-like diarrhœa, attended with manifold bad ſymptoms, with which a gentleman was ſeized, who had from his youth upwards been extremely hypochondriacal and weak, and previouſly to this had had a continual diarrhœa in 1763 and 1764, and in the year 1765 a violent dyſentery, after which attack the ſimaruba ſeemed rather to increaſe than diminiſh the malady. In my judgment this medicine does beſt in caſes, where the patient requires merely to be ſtrengthened, and not when a detergent is wanted, for in that point it is excelled by the tincture of rhubarb. In every diarrhœa and dyſentery, where the bowels harbour a corrupt putrid matter, the ſimaruba is either uſeleſs or pernicious; but when this is cleared away, it braces the relaxed bowels, and all their veſſels. It is extremely hurtful in dyſenteries, that are attended with ulcers in the bowels. It has likewiſe been obſerved, that the ſimaruba operates much better and is more effectual in ſuch chronic dyſenteries, as are at the ſame time bloody; but when after the blood ceaſes to appear, the ſtools remain liquid and mucous; if the caſcarilla be then added to the decoction of ſimaruba, the ſtools are then much more opportunely diminiſhed, and by their united

united force the cure is alſo compleated much more ſpeedily and certainly.

All things taken together, ſelect, genuine, and undamaged ſimaruba is no bad remedy with the above-mentioned proviſo in dyſenteries of long ſtanding. The beſt method to give this bark to the ſick is this; take two drachms of it, and let them digeſt two hours in a pint of water in a warm place; then boil the whole for half an hour, pour it through a ſieve, and give one half of it in the morning and the other in the evening; continue every day in this manner, and in caſe it ſhould be requiſite, for the ſpace of three or four weeks; if it be obſerved, that with the uſe of this decoction the urine paſſes more plentifully, and grows of a paler colour, it may be looked on as a ſign, that the remedy takes effect, and that the looſeneſs will ſoon ceaſe. Others mix two drachms of this bark cut very ſmall with two pints of water, boil it to one third, and order it to be taken warm at four times in the ſpace of a day; or elſe they exhibit half a drachm of the powder with two ounces of water or ſyrup of maidenhair, and repeat the doſe till the cure be compleated.

When Degner had patients, to whom every thing, and even the ſimaruba itſelf had been given

given in vain, or without the wiſhed for effect, and whoſe bowels were grown exceſſively weak and relaxed, he then made uſe of corroborating remedies, and even of ſuch as were abſolutely of a reſtringent nature, as caſcarilla and terra Japonica with great benefit. The caſcarilla is a good ſtrengthener, though in other reſpects Stahl's followers in Germany have made too much of it. The terra Japonica requires more caution, being of an aſtringent nature; but it is not at all to be rejected in caſes, where there is need of aſtringents. Extract of Campeachy wood diſſolved in mint-water, and lime-water diluted with milk, were very effectual too in this reſpect.

In dyſenteries attended with exulcerations, trials have likewiſe been made, which I cannot paſs by in ſilence. In that degree of the dyſentery, in which the body was exceſſively weakened and exhauſted of all its ſtrength, in which the pieces that came away from the tunica villoſa of the inteſtines, betrayed a very conſiderable relaxation of the bowels, in which, inſtead of blood, a thin purulent matter was ſeen in the ſtools, Degner found no purge of any ſervice beſides manna and the extract of rhubarb. With theſe he gave daily vulnerary herbs infuſed in water; alſo in the interim extract of

bark

bark and caſcarilla; and in this manner, in the ſpace of ſix weeks or two months, he conceived hopes of ſome of his patients, that they might ſtill get perfectly well. Gum arabic was of good effect in the chronic ſuppurative dyſentery, and is therefore with much reaſon greatly prized in ſuch caſes, and given with the uſual decoction, or in barley-water: Dr. Baldinger, from whoſe treatiſe, known to me but too late, I have learned ſo much with the greateſt gratitude, found this gum very good, when the bowels were eroded. Gum tragacanth was in like manner ſalutary in theſe caſes. Maſtich was a good and ſure remedy, partly as a corroborant, and partly as a balſamic; Dr. Baldinger has alſo obſerved, that the balſam of maſtich (as it is called) according to the preſcription of his Pruſſian majeſty's phyſician in ordinary Cothenius, is a very efficacious remedy if it be made uſe of as an aſtringent, with prudence. In abſceſſes of the ſtomach, that were formed in conſequence of the dyſentery, and were burſt, Mead got his patients well with the balſamum locatelli.

The method of cure found from mature experience, to be moſt univerſal and beſt in chronic dyſenteries, remains ſtill to be taken into conſideration. Among the remedies that come under this predicament, purgatives are very neceſſary

ceſſary even during the uſe of quite different remedies, or elſe given at intervals from time to time. Not only the putrid humours, but likewiſe the hard excrements, that often remain in the cavity of the inteſtines, muſt be evacuated; if this be neglected to be done, the patients are often ſeized with a ſickneſs at ſtomach, tormina, and a violent looſeneſs. If they ſhould at any time have a pain in the bowels, and little morſels of hard excrement come away from them, this is moſt commonly a certain ſign, that evacuations are neceſſary; and for the moſt part they give relief to the patient. Sickneſs at ſtomach, with the other circumſtances, that uſually attend it, requires an emetic to be given, before the patient be purged; in caſes where the patient is very weak, or in violent pains and teneſmus, clyſters are made uſe of. It has been remarked, that in complaints of long ſtanding, and already arrived to a high pitch, the patient has appeared to get better; but on evacuation of the above-mentioned globular hard excrements, has had a relapſe; as theſe ſcybala came away for many days together, and cauſed thereby a perpetual irritation: they ſhould therefore be expelled in proper time either by a good doſe of rhubarb and manna, or elſe with tamarinds, or the frequent exhibition of oily clyſters.

Some gentle purge ſhould always be given alternately with the other medicines, when there is no ulcer, nor any thing worſe in the bowels; and this ſhould be continued, till the belly-ach and teneſmus is entirely put a ſtop to. I do not know from my own experience, what power Glauber's purgans catholicum, ſo much eſteemed by Dr. Werlhoff, in the doſe of half a grain or a grain, in diarrhœas of long ſtanding, may have in this reſpect; but this I know, that the tincture of rhubarb made with water is with this view a very excellent medicine. I have often ſeen, that it braces the patient more, and even cures the purging more certainly in this ſtate of the diſorder, than aſtringents.

Brockleſby made uſe of a method in the chronic dyſentery, which deſerves notice, as it conſiſts in the junction of two medicines, which are ſeldom ſeen together. Every morning and evening he gave two grains of opium made into pills with three grains of powder of ipecacuanha, and found this remedy uncommonly ſerviceable to many people. The ipecacuanha given in this manner became a mere gentle purge; while on the other hand the opium alleviated the irritation occaſioned by the ipecacuanha and morbific matter. The Doctor found no remedy more

more extenſively uſeful in the chronic dyſenteries, that came under his obſervations, when the purging and bloody ſtools were ſtill conſiderable, but the fever was quite gone; and he affirms, that no one can conceive without making trial of it himſelf, how much the mitigating power of the opium corrects the irritation of the ipecacuanha, and on the other hand is itſelf corrected by it. I know from my own experience that thus far is true; but this medicine has often proved unſerviceable.

In general the following method ſeems the moſt likely to cure dyſenteries of this ſort, when they are not arrived to too high a pitch.

The patients muſt be content with a thin low diet, conſiſting chiefly of milk, rice, ſago, and ſalep. They may be indulged in weak meat-broths, and chicken or veal, when they find themſelves actually in a ſtate of recovery. Their uſual drink muſt be barley-water, thin rice-gruel, toaſt and water, or almond-emulſion. They muſt go warm cloathed, and be particularly careful not to give occaſion to the repulſion of the perſpirable matter; for errors in diet of every ſpecies and catching cold are the moſt uſual cauſes of relapſes.

Gentle purges ſhould be given from time to time either of manna or ſalts, or elſe of manna diſſolved in almond-emulſion; or rather tincture of rhubarb; and ſometimes a gentle emetic.

Among the ſtrengthening and gently aſtringent remedies the bark combined with aſtringents and opium is of ſervice to ſome perſons; to others aſtringent and anodyne clyſters; others do better with other things; and many find themſelves better, when they do not take any medicines of this ſort at all.

The patient ſhould occaſionally take opiates, go into the freſh air, and ride with moderation by way of ſtrengthening the bowels.

Dr. Monro, the inventor of this method, has ſeen caſes in this dyſentery (at the commencement of which the patient had gone through a due courſe of evacuation) cured with nothing elſe than broths, white meats, riding out every day, and a glaſs of good wine. But he remarks very earneſtly withal, that this method was ſerviceable only in ſlight caſes, which had been previouſly palliated by the means of evacuations.

Dr. Brockleſby indeed is more favourable to wine in chronic dyſenteries, than my friend Monro.

Monro. In all thoſe dyſenteries of long continuance, where the patient is quite worn out and waſted away, which followed thoſe bilious fevers that were in particular very frequent in the year 1758 after the return of the Engliſh from the coaſt of France, Dr. Brockleſby found port wine mixed with water very neceſſary; and often allowed his patients a pint and a half of it mixed with a ſufficient quantity of water every 24 hours during the ſpace of three weeks or a month. This with a pleaſant decoction of cinnamon, orange-peel, and other aromatics boiled in ſpring-water, and given in a proper doſe, was an excellent remedy, but was only preſcribed to ſuch as had no fever in the leaſt. The ſoldiers took ſometimes the ſpecies aromaticæ in the doſe of ten or fifteen grains every eight hours in this grateful decoction, with a view to warm their cold and relaxed bowels, to put their blood in motion again, and reſtore to the ſolids their wonted force. But when the purging continued, and the teneſmus was joined with it, (a circumſtance, which at this time was not at all unuſual) the Doctor found it indiſpenſibly neceſſary to preſcribe again the gentle purges of ſalts, manna, and ſweet oil; and to repeat them in proportion to the patient's forces, till ſuch time as the teneſmus was over; which moſtly happened in a ſhort time after. Yet having opened two

perſons, that died in this juncture, he found in both of them the rectum inflamed in the higheſt degree ſome inches above the anus, though their fever had ceaſed a long time ago. A new proof, how cautiouſly we ſhould proceed with wine even in theſe old and tedious caſes of the dyſentery.

But unſkilful imitators ſhould not only be cautioned on the ſubject of wine, but alſo concerning the abuſe of aſtringents, and that even with reſpect to the chronic dyſenteries here treated of.

One cannot be too cautious with reſtringents. Some years ago profeſſor Schobinger had a young lady of quality at St. Gallen for his patient, in a ſlight but tedious dyſentery; after copious evacuations this worthy phyſician, ſo little known in his own city, at length gave her corroborants and gentle aſtringents; the Peruvian bark mixed with a certain quantity of caſcarilla, the ſpecies hyacinthi, and the bolus armena, all in very moderate doſes, and at a time, when the purging and pains were almoſt quite gone; notwithſtanding which there enſued on the uſe of theſe medicines a flying gout, that laſted three weeks. Brockleſby confeſſes, it has but too often happened to him, notwithſtanding the caution

caution with which he made uſe of aſtringent remedies, that inſtead of ſhortening the diſorder he only prolonged it, brought the fever on again, and was obliged to begin afreſh with vomits and purges. The miſcarriage of Dr. Monro's various endeavours to cure the chronic dyſentery appears too moſtly to proceed from the uſe of aſtringent or conſtipating medicines. Even in that uncommonly mild chronic dyſentery at Java, deſcribed by Dr. Laurich, which in gentleneſs much exceeds moſt of our European dyſenteries, reſtringents are extremely noxious. The phyſicians of the country, as well as the European phyſicians ſettled there, have recourſe to them in this dyſentery. The Indian phyſicians make uſe of the fruits called billingbing, macandou, nimbo, carambolas, and jangomas; with theſe and other medicines of the ſame kind they put a ſtop to the looſeneſs, without having preſcribed purgatives beforehand, and that to the great prejudice of the ſick. Even the European practitioners there, who are moſtly ſurgeons in the ſervice of the Dutch Eaſt-India company, fall into the like errors; and a manual printed in the Dutch tongue at Middleburg for their inſtruction, teaches them theſe very errors. Their moſt efficacious remedies are the bolus armena, terra Japonica, a kind of terra ſigillata from Spain,

dragons blood, burnt harts-horn, corallium rubrum, the peels of unripe pomegranates, ſolid opium, and the inſpiſſated juice of ſloes: from all and each of which remedies Dr. Laurich ſaw an eroſion of the bowels, a conſequent ſuppurative fever, the moſt terrible fiſtulæ in ano, and very often death itſelf take riſe in this otherwiſe ſlight though tedious dyſentery. It is conſequently a very neceſſary and univerſal caution even in the chronic dyſentery, never to give aſtringents without being firſt perfectly convinced, that the peccant matter is evacuated, and that the ſole cauſe of the complaint is a laxity of the fibres.

I ſhall now conclude this long diſcourſe by farther taking into conſideration ſome new remedies, and laſtly the various ſpecifics recommended in the dyſentery.

The vitrum ceratum antimonii was firſt made known as a powerful remedy in divers diſtempers, and chiefly in the dyſentery, in conſequence of the experiments of Dr. Young, Francis Pringle, Simpſon, Paiſley, Stephen, and Gordon, which were inſerted by Dr. Pringle in the Edinburgh Eſſays. Dr. Young takes an ounce of the glaſs of antimony in powder and a drachm of white wax; the wax being previouſly melted

melted in an iron ladle, the powder is caſt into it; the whole maſs ſet over a gentle fire without flame for half an hour, ſtirred about with a ſpatula continually, then taken off, poured on a ſheet of white paper, and reduced to powder. Of this powder Dr. Young gave in the dyſentery ten or twelve grains to adults; but uſually for greater certainty began with ſix grains; to children of ten years of age he gave from three to four grains; and to thoſe of three or four years of age from two to three. In general the powder given in this manner occaſioned a ſickneſs at ſtomach and vomiting: moſt people were purged by it; though ſometimes the cure was compleated without any ſickneſs or evacuation. When it had operated too violently, the Doctor omitted the uſe of it for a day: ſome were cured with one ſingle doſe, others required five or ſix; eſpecially when the firſt doſes were too weak. He gave this medicine faſting, and forbid all drink for three hours after it; but allowed warm water as with other emetics, when the patient was ſick at ſtomach, or felt an inclination to vomit: the diet was the ſame, as is uſually preſcribed in the dyſentery.

Dr. Francis Pringle's, Brown's, and Simpſon's experiments agreed with Dr. Young's, and

and were extremely favourable to this remedy. Dr. Simpſon was aware, that on account of the variety in the ſpecies of the dyſentery, it could not be ſerviceable to every body; and yet he looked upon it to be in moſt caſes as great a ſpecific in the dyſentery, as the bark in intermittent fevers, and external mortifications. Dr. Paiſley at firſt made uſe of this remedy prepared in the ſame manner with much ſucceſs; but afterwards, in purſuance of another receipt, he only rubbed the ladle over with the white wax, and did not reduce the glaſs to powder, before he put it into the ladle; after having held it the uſual time over the fire, the wax ſtuck faſt to the ladle, and when all was cold, he reduced the glaſs to a fine powder. He had ſeldom occaſion for more than three grains of this preparation, and never gave above five to ſtrong perſons. In this way it operated full as well; and, notwithſtanding the ſmallneſs of the doſe, in the ſame manner as the other; and Dr. Paiſley cured with it a great number of dyſenteries. Four or five doſes for the moſt part perfected the cure, if they were uſed in time; if the diſorder was of longer ſtanding, he was forced to give ten or fifteen doſes, and never ſaw any bad effect from it. Dr. Stephen, out of a hundred and ninety perſons that he treated with

with this remedy, loſt but one. Dr. Gordon cured ſome hundreds of people with this medicine in ſmall doſes, and ſince that it has never miſcarried with him; except in one or two caſes, in which he had proceeded rather too far with his patients; he commonly gave three grains of it, and never above five; a doſe or two was often ſufficient, and he ſeldom gave three; he ordered it to be taken in the morning, and it was often two hours, before it operated; ſome were purged by it, others both purged and vomited, and were ſick for ſix or eight hours together after it: at night he always gave a good doſe of opium.

Since that time this medicine has been tried in various manners over all Europe. La Mettrie, who is ſo great an enemy to aſtringents and opiates, is on the other hand very fond of emetics in the dyſentery; and eſpecially thoſe prepared with antimony but diſſolved in a great deal of water, which rather act upwards than downwards, and which he looked upon as milder than rhubarb, as they rid the body at once of a ſharp ſtimulating matter. Even when a gangrene was aprehended, in obſtinate dyſenteries La Mettrie made uſe of the vitrum ceratum antimonii in the quantity of a quarter of a grain, and vaſtly extols its virtues even in taking

taking away the pain; especially when the body has not been previously well purged either by nature or by art. Many experiments were made besides in France and Germany; and very lately an ingenious physician, Dr. Lentin, has found this remedy of great service in the dysentery; the Westphalian peasants, a people as tough as leather, can however bear but ten grains of it; and even our egregious Conrad Rahn honours it with his approbation. I have related in the sixth chapter the latest experiments made with it in the dysentery of 1765.

Now these experiments seem indeed to promise a great deal, but yet posterior experience has very much limited the reputation of this medicine. Her Britannic majesty's physician in ordinary, Dr. Pringle, whom we have to thank for the publication of these experiments in the Edinburgh Essays, found this medicine the most specific of all emetics with the English army, not only in giving relief to the stomach, but to the bowels too, if exhibited in the beginning of the disorder. But notwithstanding his being convinced, that it was a medicine of great power, he could not help being solicitous on account of its constant boisterous operation towards the end; and wished that he was able to cure his patients with more gentle remedies, though

though they ſhould chance to be ſlower in their operation. He therefore limited its uſe to obſtinate caſes; and ſaw that it did good ſervice, where other things did none at all; if the bowels were but in a tolerable good condition, the patient but little feveriſh, and not too weak. He makes withal the following good remark; that this remedy is attended with an inconvenience common to all preparations of antimony, namely the difficulty of aſſigning a proper doſe for it; as a middling doſe is at one time too ſmall, and at another time too large. Dr. Eller made uſe of this medicine with two ſtrong perſons ill of the dyſentery with the greateſt ſucceſs; on the other hand he found it very difficult with others of his patients to fix on a proper portion; as ſometimes the ſame doſe excited neither vomiting nor purging, and ſometimes produced both but too violently. Dr. Monro found in the Engliſh army during the laſt war, that this remedy operated much too powerfully; and therefore it was almoſt entirely laid aſide.

Mr. Geoffroy at Paris has indeed endeavoured to find a corrector for this medicine, which, as it was imagined, would be able perhaps to prevent the indeterminate mode of its operation. Without doubt the exact mixture of the wax with the vitrum antimonii, renders this otherwiſe

wiſe very terrible medicine a ſalutary one, and on this account Young's receipt is better than Paiſley's: on the other hand Geoffroy has ſhewn a ſtill better method of involving this glaſs by the means of an oil, with which the glaſs is to be levigated on a porphyry-ſtone. But with all this, though it muſt be owned to be an excellent medicine in the bilious, and ſometimes too in the chronic dyſentery; it is, partly for the reaſons above-mentioned, and chiefly on account of the caution with which it ought to be uſed in inflammatory or even malignant dyſenteries, at all times a dangerous remedy in ignorant hands, and not always adviſeable in the moſt judicious.

The orchis, that comes to us from Perſia under the name of ſalep, is alſo reckoned among the new remedies for the dyſentery. Du Buiſſon, who got this root directly from Mocha, did not look upon it in reality as a root, but as a kind of fig dried in the ſun: my great maſter baron Haller, takes it for what it really is, and calls it the Perſian orchis. It has the property in common with our, and even the Swediſh orchis, of being very clammy and full of a thick mucilage; the powder of it mixed with a good deal of water, and ſet over a very gentle fire, turns to a jelly, and is looked upon to be full as mucilaginous as tragacanth. It is on that account

account without doubt of uſe in the dyſentery, whenever a medicine of this kind is neceſſary; but it poſſeſſes too at the ſame time a gentle aſtringent nature, and therefore muſt be exhibited with great caution. I know very well, that after being uſed for ſome time it binds the body, and by cauſing the pains to return makes evacuants neceſſary.

Sago, a ſeed that comes to us from Japan, Ternate, and Amboyna, and which in the ſame manner turns to a jelly, is eſteemed for the like quality. It does not only aſſwage the pain, but is likewiſe nouriſhing; and mixed with ſugar and lemon-juice, a very palatable remedy. But there is nothing extraordinary excellent in it; and it is as little ſpecific as the Perſian orchis.

The gitta gambir, which muſt not be confounded with the gutta gamba, is in like manner a new remedy much eſteemed in the dyſentery. It conſiſts of little lozenges prepared in the iſland of Java, and which are ſuſpected to be chiefly compoſed of terra Japonica, or the juice of the catechu-tree, or at leaſt of ſome parts of that vegetable. The greateſt partiſans of this remedy allow, that it does not cure the dyſentery without other auxiliaries: it is beſides very dear, and muſt be taken in greater quantities

tities than the terra Japonica, with which it chiefly agrees in properties, and on that account ought to be rejected in moſt caſes.

The bark of the tree mangoſtan, which has been tranſplanted from the Molucca iſlands to Java, and at Batavia is looked upon as the greateſt ornament of their gardens, is likewiſe reckoned among the new remedies for the dyſentery. It has ſome reſemblance to pomegranate-peels, but is for that very reaſon to be rejected in moſt caſes.

The codaga pala, or the coneſti bark, is conſidered in Ceylon and Malabar as a powerful remedy in the dyſentery, and is very much eſteemed in England, at leaſt in diarrhœas. This medicine is bitter, and as ſuch, may have its uſe in ſome dyſenteries, when the primæ viæ are previouſly cleanſed; but it has not been found more effectual than other bitter aromatics. It has ſometimes even ſhewn a torpefying power, and once in the preſence of Dr. Brockleſby, given in the quantity of two drachms, it cauſed the ſpaſmus cynicus.

The aromatic bark of the guyava-tree is thought to be very ſerviceable, eſpecially in bloody dyſenteries: I was alſo told at Paris about

about fifteen years ago, that they had begun to make uſe of an American root, called Poegereba, with the ſame view. But who does not know, that many dyſenteries totally differing in ſpecie from each other, are attended with blood?

But I here break off with pleaſure; and rather deſire my readers to ponder the remark ſo often made, that a nauſeous heap of noſtrums rather ſerves to render the phyſician doubtful and undetermined, than to anſwer the end propoſed; and that a phyſician, who underſtands his buſineſs, will obtain his purpoſe infinitely better in all reſpects with a few well-choſen remedies, than an ordinary practitioner with all the riff-raff of the apothecaries ſhops.

I come at laſt to the ſpecifics, as they are called, the only thing in the whole art of medicine, on which the party that is ſet up againſt Dr. Tiſſot, and which ſo manifeſtly endeavours to eſtabliſh empiriciſm, at preſent chiefly founds its reputation; and which therefore in obſtinate diſorders looks for one ſpecific after another with no other purpoſe, than with hopes at laſt to find the very medicine, that God has created ſolely for the uſe of the very patient, they chance at that time to attend.

I know from my own experience the truth of what Dr. Tiſſot ſays, that there is no diſorder in which there are more pretended infallible ſpecifics recommended, than in the dyſentery; that there is no one that does not trumpet forth the praiſes of his own noſtrum, prefer it before any other, and promiſe with the moſt perfect aſſurance to cure a tedious diſorder of long ſtanding, of which he has not the leaſt idea, in a few hours, with a remedy, the effects of which are entirely unknown to him: while the poor patient, full of ſuffering and anxiety, and teized to death, takes every thing from every body, and thus out of fear, wearineſs, or complaiſance, poiſons himſelf. But I know likewiſe from my own experience, how dangerous it is to attack openly the profeſſors of an art, in order to ſhew them the prejudices that have inſinuated themſelves into it: for this is ſurely to attack the ſelf-love of ſuch, as entertain theſe prejudices; and thus by forcing them to defend themſelves, we create ourſelves as many enemies, as there are perſons, for whoſe information we wrote; and ſtir up as many antagoniſts, that join in open cry againſt us, as there are people, that moſt ſtand in need of our inſtructions. The danger of ſuch a procedure is emphatically ſet forth by a Genoeſe, as famous for the acuteneſs of his imagination as the uprightneſs of his conduct, in a treatiſe lately

lately publiſhed, and very much wanted, on "the neceſſity and method of curing the art of "phyſic of the very dangerous diſorder of fraud."

I am indeed as far as any other phyſician of probity from leſſening the reputation of a medicine's virtues, if its effects do but conditionally anſwer to the character given of it. But I hope I may be allowed to doubt with diſcretion, as long as I am not convinced; to chuſe out of many remedies thoſe few, that conduct me in a ſure manner to my propoſed end; and to be angry at the blindneſs of ſuch, as in deſperate caſes cry up the ſorrieſt traſh for infallible remedies, becauſe they confeſſedly would not be able to do any hurt in very ſlight caſes; or that recommend a thing, which is indiſputably ſerviceable in one ſpecies of a diſtemper, likewiſe in another ſpecies of the ſame diſorder, in which it is manifeſtly fatal. In fine, I hope to be permitted, in this labyrinth of human opinions, never to ſubject myſelf blindly to the ſentiments of any other man, to look on the ſtate of the learned in general as a republic, and that a free one; and to proceed on the road to truth with the greater caution, the eaſier it is to ſtep aſide from it into the path of empiriciſm. Who is ignorant, that the virtues of medicaments are never abſolute and infallible, but merely relative,

and depending on the nature of the malady, and the patient's conſtitution; that on that account there is ſcarce any remedy to be found that is univerſal in all caſes, though ſome are nevertheleſs poſſeſſed of very extenſive powers; and that in general we are not ſo much in want of a ſtore of medicines, as of ſkill to make a proper choice of them.

The arguments, which phyſicians have brought to defend their moſt eſteemed remedies, in the dyſentery, are perfectly ridiculous. Formerly antacids were eſteemed in the dyſentery on the ſtrength of that falſe maxim, that this diſorder aroſe from an acid; for which reaſon all four things were forbidden; though nothing could be indicated more efficacious, with regard to its ſo often putrid nature. The authors of the Breſlau Journal of 1699, 1700, 1701, and 1702, ſay very ſeriouſly: as the dyſenteric matter is acrid, ſharp, ſour, and irritating; it is very clear, that antacids ſhould be uſed here, among which coral, the Sileſian terra ſigillata, the prepared criſtalla montana, periwinkles, and crabs-eyes, deſerve the preference; that is to ſay, remedies, which for the moſt part are endued with the property of increaſing the putrid nature of the dyſentery. In like manner we ſhall find here and there ſome of our Swiſs phyſicians,

phyſicians, who preſcribe nothing in our putrid fevers, as they are called, but theſe ſame abſorbents: in their opinion they ſweeten the blood, which however, according to Dr. Pringle's experiments, they manifeſtly render putrid, and in the mean while let the bilious matter, which ought to be evacuated, lie peaceably in the body. However the doctrine of acidity, that ancient gratuitous cauſe of all diſorders, was ſcarcely baniſhed; when the phyſicians took it into their heads, that it was neceſſary to make uſe of reſtringents in the dyſentery. Accordingly they ſelected from other aſtringents ſuch as at leaſt better agreed with this ſyſtem, coral, burnt harts-horn, and the like; but ſad experience has ſhewn us, that theſe medicines are not even reſtringent. The terræ ſigillatæ indeed are, and by that means ſtop the flux, cauſe the heart-burn, vaſt anxiety, and often death itſelf; they are nevertheleſs cried up as the greateſt ſpecifics, and univerſal panaceæ in all dyſenteries, and are even yet frequently preſcribed in them.

It is certain, that ſpecifics in general cannot be adviſed on any foundation: for moſtly the perſon, who recommends them, appeals to experiment alone, in conſequence of which an otherwiſe

wise neglected or dreaded remedy sometimes appears to do wonderful things in a disorder, or according to a report often not to be relied upon, has actually done them. Experiment is certainly the best guide; when he that appeals to it is capable of making experiments, and drawing proper conclusions from them.

FINIS.

ERRATA.

Page 14. line 13. *for* already, *read* so early as.
——— l. 15. *dele* out.
P. 28. l. 8. *for* ensues, *r.* it ensues.
P. 30. l. 3. *for* are, *r.* is.
P. 49. l. 19. *for* atribilanious, *r.* atrabilarious.
P. 108. l. 25. *for* premature, *r.* anticipating.
P. 221. l. 26. *for* the patient, *r.* my patient.

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